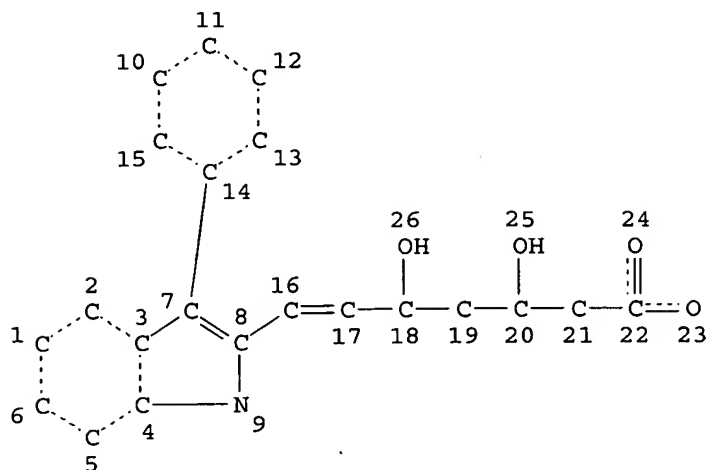


QAZ1  
10/517874

Page 1

=> d 15 que stat;fil caplus;s 15  
L1 STR



NODE ATTRIBUTES:  
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE  
L3 STR

Ca 1

NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE  
L5 2 SEA FILE=REGISTRY SSS FUL L1 AND L3

100.0% PROCESSED 2 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	162.62	162.83

FILE 'CAPLUS' ENTERED AT 16:48:34 ON 01 SEP 2005  
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Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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FILE COVERS 1907 - 1 Sep 2005 VOL 143 ISS 10  
FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L6 3 L5

=> d 1-3 ibib abs hitstr

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:182623 CAPLUS

DOCUMENT NUMBER: 142:280050

TITLE: Novel process for preparation of 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid sodium salt

INVENTOR(S): Srinath, Sumithra; Puthiaparampil, Tom Thomas; Ganesh, Sambasivam

PATENT ASSIGNEE(S): Biocon Limited, India

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005019170	A1	20050303	WO 2003-IN287	20030826
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			WO 2003-IN287	20030826

OTHER SOURCE(S): CASREACT 142:280050

AB A process for the preparation of (3R,5S,6E)-7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid (I) sodium salt, also known as fluvastatin sodium, comprises (a) treating a solution of I or its salt with a suitable cation to afford an insol. salt I, (b) isolation of the insol. salt of I, (c) conversion of the insol. salt of I

to I sodium salt. This process is economic since expensive reactants/reagents are not employed. It is simple since it involves salt formation at ambient conditions. Also it is a highly efficient purification method, as only salt of required product ppts. All impurities which do not form salt with second cation remain in the solution, thus resulting in isolation of the product with a high degree of purity. No further purification of the product is required and hence the number of steps is reduced. It results in high yields as no byproducts are formed and recovery of insol. salt is almost quant. It also results in high isomeric purity of the product, as it avoids lactonization and saponification, during which

epimerization

may occur. Thus, to a solution of [(4R,6S)-6-[(1E)-2-[3-(4-fluorophenyl)-1-isopropyl-1H-indol-2-yl]vinyl]-2,2-dimethyl-[1,3]dioxan-4-yl]acetic acid tert-Bu ester (2.5 g, 0.005 mol) in MeCN (40 mL), aqueous HCl (7.5 mL, 0.1 N) was added and stirred for 2 h at 30-35°. After cooling the reaction mixture to room temperature, aqueous sodium hydroxide (10 mL, 10%)

was added

and stirred for 16 h at room temperature The reaction mixture was

concentrated under

reduced pressure and water (30 mL) was added to the residue. The solution was further concentrated (25 mL volume) and extracted with Me tert-Bu ether (2

x 15

mL). After adjusting the pH of aqueous layer to 7.0-7.2 by adding aqueous HCl (1.0 N), a solution of calcium acetate (0.6 g, 0.0038 mol) in water (10 mL) was added under stirring at 20-22°. The reaction mixture was further stirred for 30 min to completely precipitate calcium salt of fluvastatin. It

was

filtered and dried to give pure fluvastatin calcium salt which was suspended in water (15 mL) and pH of the mixture was adjusted to 4.0-5.0 by adding aqueous HCl (1.5 N). The aqueous layer was extracted with ether (2 x

15 mL),

combined ether extract was washed with brine and concentrated The residue was mixed with water (15 mL) and a solution of sodium hydroxide (0.14 g, 0.035 mol) in water (1 mL) was added. After stirring for 15 min, the reaction mixture was washed with ether (2 x 15 mL). The aqueous layer was freeze-dried to get pure fluvastatin sodium salt.

IT 634902-71-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

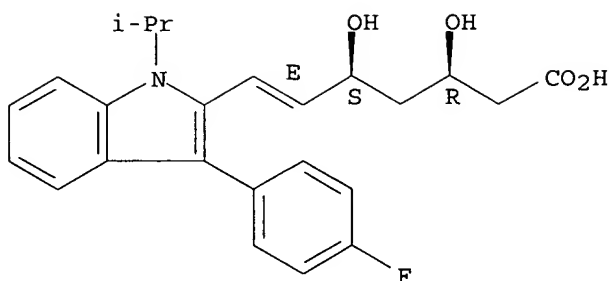
(intermediate; novel process for preparation of 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid sodium salt via precipitation of insol. salt and its conversion to sodium salt)

RN 634902-71-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, calcium salt (2:1), (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



● 1/2 Ca

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:1006762 CAPLUS

DOCUMENT NUMBER: 140:47480

TITLE: Calcium salts of indole derived statins

INVENTOR(S): Chen, Guang-Pei; Kapa, Prasad Koteswara; Sutton, Paul Allen

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105837	A1	20031224	WO 2003-EP6195	20030612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
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CA 2486557	AA	20031224	CA 2003-2486557	20030612
EP 1515717	A1	20050323	EP 2003-740234	20030612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-388318P	P 20020613
			WO 2003-EP6195	W 20030612

OTHER SOURCE(S): MARPAT 140:47480

AB The present invention provides calcium salts of indole-derived statins. More specifically, the invention provides fluvastatin calcium (I), in a highly crystalline form. Furthermore, the present invention is directed to methods for the preparation of I, and to pharmaceutical compns. comprising the crystalline form. The I is effective for the prevention and/or treatment of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia, and atherosclerosis.

IT 634902-71-9P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)

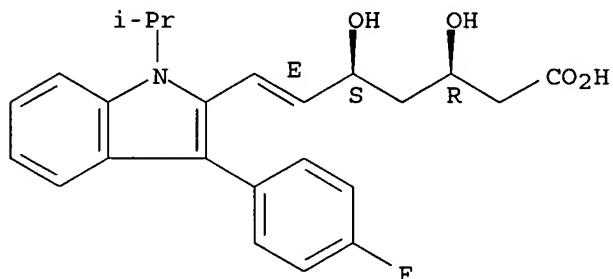
(preparation of crystalline fluvastatin Ca salt and blood  
 cholesterol-lowering  
 effects thereof)

RN 634902-71-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, calcium salt (2:1), (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



● 1/2 Ca

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:154436 CAPLUS

DOCUMENT NUMBER: 138:204870

TITLE: Processes for preparing calcium salt forms of statins

INVENTOR(S): Niddam-Hildesheim, Valerie; Lifshitz-Liron, Revital;  
 Lidor-Hadas, Rami

PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva  
 Pharmaceuticals USA, Inc.

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

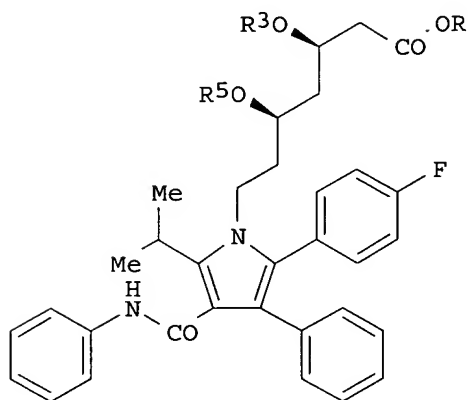
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WO 2003016317	A1	20030227	WO 2002-US26012	20020816
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

US 2002099224	A1	20020725	US 2001-37412	20011024
US 6528661	B2	20030304		
CA 2450820	AA	20030227	CA 2002-2450820	20020816
US 2003114685	A1	20030619	US 2002-222556	20020816
US 6777552	B2	20040817		
EP 1425287	A1	20040609	EP 2002-759374	20020816
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TR 200302281	T2	20040921	TR 2003-200302281	20020816
CN 1543468	A	20041103	CN 2002-815999	20020816
JP 2005500382	T2	20050106	JP 2003-521239	20020816
NZ 529913	A	20050324	NZ 2002-529913	20020816
ZA 2003009373	A	20041202	ZA 2003-9373	20031202
NO 2004001082	A	20040315	NO 2004-1082	20040315
US 2004176615	A1	20040909	US 2004-803414	20040318
PRIORITY APPLN. INFO.:				
			US 2001-312812P	P 20010816
			US 2001-37412	A 20011024
			US 2000-249319P	P 20001116
			US 2001-312144P	P 20010813
			US 2001-326529P	P 20011001
			US 2002-222556	A3 20020816
			WO 2002-US26012	W 20020816

OTHER SOURCE(S) : MARPAT 138:204870  
GI



I

AB Processes for preparing hemicalcium salts of a statins  
 $\text{RCH(OH)CH}_2\text{CH(OH)CH}_2\text{CO}_2\text{H}$  (R = statin organic radical selected from pravastatin, fluvastatin, cerivastatin, atorvastatin, rosuvastatin, pitavastatin, simvastatin, or lovastatin) from an ester derivative or protected ester derivative of the statin by using calcium hydroxide are provided. The ester or protected ester derivative is contacted with calcium hydroxide to obtain the calcium salt. Preferred statins are rosuvastatin, pitavastatin and atorvastatin, simvastatin and lovastatin. In processes beginning with a protected statin ester derivative, the protecting group is hydrolyzed during salt formation by contact with calcium hydroxide, or is contacted with an acid catalyst followed by contact with calcium hydroxide. Thus, diol-protected atorvastatin ester I (R = CMe<sub>3</sub>, R<sub>3</sub>R<sub>5</sub> = CMe<sub>2</sub>) was treated with an 80% aqueous soln of AcOH at rt for 20 h to form the deprotected ester I (R = CMe<sub>3</sub>, R<sub>3</sub> = R<sub>5</sub> = H) which was in turn dissolved in EtOH, treated with a saturated soln of Ca(OH)<sub>2</sub> containing Bu<sub>4</sub>N<sup>+</sup>Br<sup>-</sup> and stirred at 45° for 24 h to give atorvastatin hemicalcium salt I (R = 1/2Ca, R<sub>3</sub>

= R5 = H) in 77% yield for the two steps.

IT 500103-16-2P, Fluvastatin hemicalcium

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

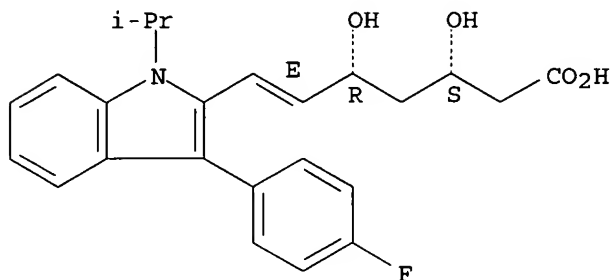
(processes for preparing calcium salt forms of statins)

RN 500103-16-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, calcium salt (2:1), (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



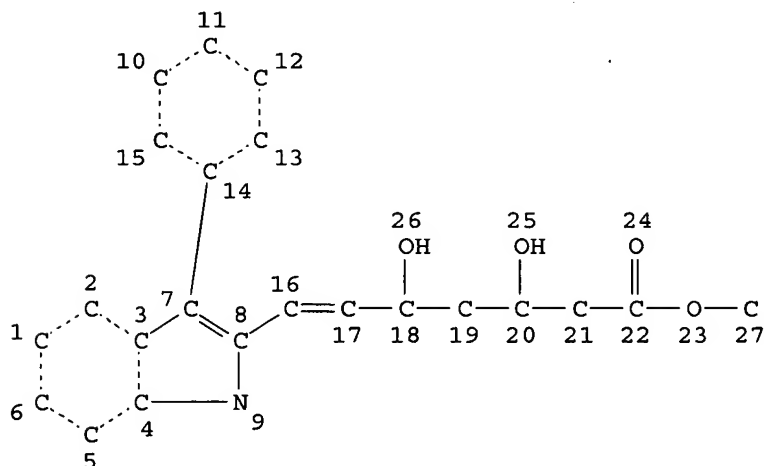
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REFERENCE COUNT:

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THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

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NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

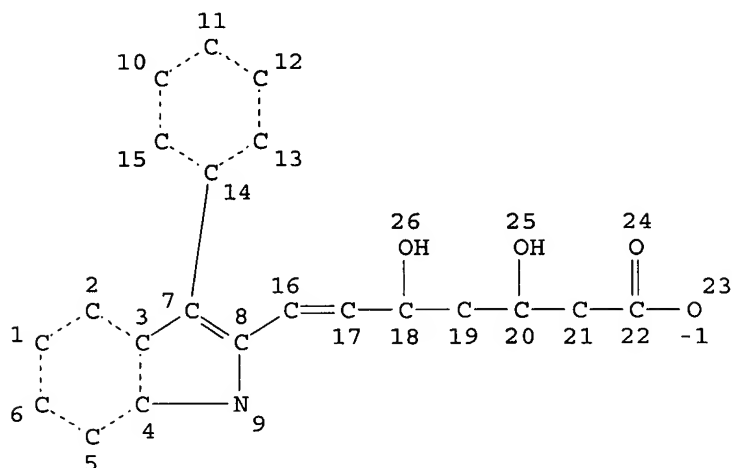
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100.0% PROCESSED 215 ITERATIONS

113 ANSWERS

SEARCH TIME: 00.00.01

L11 STR



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DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

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100.0% PROCESSED 403 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

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TOTAL

ENTRY

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FULL ESTIMATED COST

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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-2.19

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FILE COVERS 1907 - 1 Sep 2005 VOL 143 ISS 10  
FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

27 L14  
3 L5  
L16 1 L14 AND L5

=> d ibib abs hitstr

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2003:1006762 CAPLUS  
DOCUMENT NUMBER: 140:47480  
TITLE: Calcium salts of indole derived statins  
INVENTOR(S): Chen, Guang-Pei; Kapa, Prasad Koteswara; Sutton, Paul Allen  
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
SOURCE: PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105837	A1	20031224	WO 2003-EP6195	20030612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2486557	AA	20031224	CA 2003-2486557	20030612
EP 1515717	A1	20050323	EP 2003-740234	20030612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-388318P	P 20020613
			WO 2003-EP6195	W 20030612
OTHER SOURCE(S): MARPAT 140:47480				
AB The present invention provides calcium salts of indole-derived statins.				

More specifically, the invention provides fluvastatin calcium (I), in a highly crystalline form. Furthermore, the present invention is directed to methods for the preparation of I, and to pharmaceutical compns. comprising the crystalline form. The I is effective for the prevention and/or treatment of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia, and atherosclerosis.

IT **634902-71-9P**

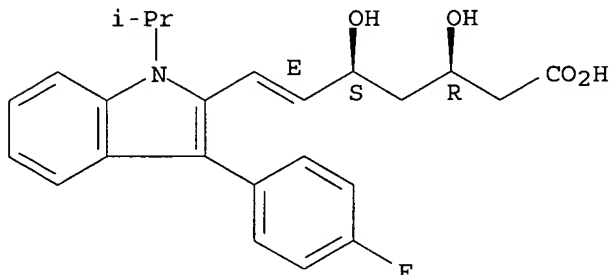
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of crystalline fluvastatin Ca salt and blood cholesterol-lowering effects thereof)

RN 634902-71-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, calcium salt (2:1), (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



●1/2 Ca

IT **194934-96-8**

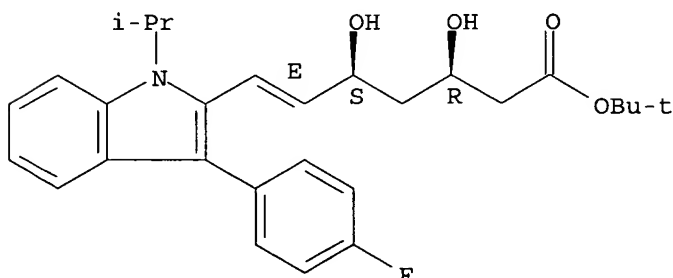
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of crystalline fluvastatin Ca salt and blood cholesterol-lowering effects thereof)

RN 194934-96-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL ESTIMATED COST	5.39	829.71
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
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CA SUBSCRIBER PRICE	-0.73	-2.92

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STRUCTURE FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1  
DICTIONARY FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

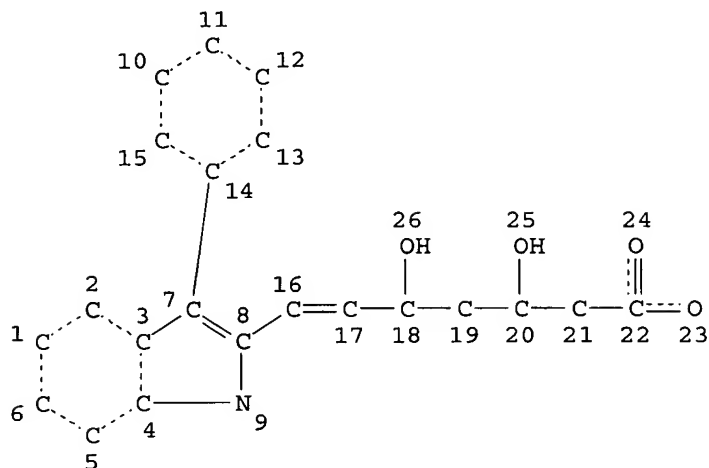
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DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE  
L21 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE  
L23 92 SEA FILE=REGISTRY SSS FUL L21 AND L18

100.0% PROCESSED 96 ITERATIONS  
SEARCH TIME: 00.00.01

92 ANSWERS

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	ENTRY	SESSION
FULL ESTIMATED COST	323.09	1152.80
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

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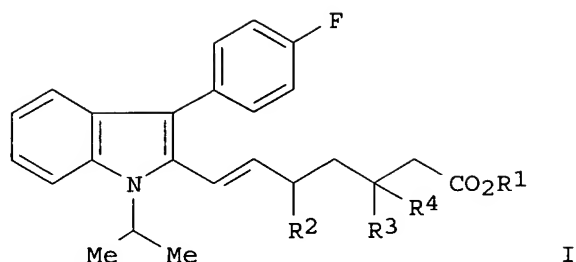
27 L14  
169 L23  
L24 19 L14 AND L23

=> d 1-19 ibib abs hitstr

L24 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2005:612271 CAPLUS  
DOCUMENT NUMBER: 143:115390  
TITLE: Process for preparation of statins with high syn to anti ratio  
INVENTOR(S): Lifshitz-Liron, Revital; Perlman, Nurit  
PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.  
SOURCE: PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063728	A2	20050714	WO 2004-US43466	20041223
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005159615	A1	20050721	US 2004-20834	20041223
PRIORITY APPLN. INFO.:			US 2003-532458P	P 20031224
			US 2004-547715P	P 20040224

GI



AB A process was disclosed for reduction of statin ketoesters, such as  $\text{RCH(Y)CH(OH)CH}_2\text{COCH}_2\text{CO}_2\text{R}_1$  [R = organic radical that is inert to redn and allows for inhibition of 3-hydroxy-3-methylglutaryl CoA; Y = H or forms a double bond with the R group; R1 = alkyl] and purification of the corresponding syn-diol esters syn- $\text{RCH(Y)CH(OH)CH}_2\text{CH(OH)CH}_2\text{CO}_2\text{R}_1$  of the statins via selective crystallization. Thus,  $\beta$ -keto ester I (R1 = CMe<sub>3</sub>, R2 = OH, R3R4 = O) was reduced using 9-methoxy-9-borabicyclo[3.3.1]nonane and sodium borohydride in methanol at -70° for 2 h followed by treatment with 30% H<sub>2</sub>O<sub>2</sub> soln to give syn-diol ester I (R1 = CMe<sub>3</sub>, R2 = R3 =  $\beta$ -OH, R4 =  $\alpha$ -H) in 73% yield and 99.0:0.45 d.e. The syn-diol ester was further purified by crystallization and subsequently treated with 47% NaOH to form fluvastatin sodium salt I (R1 = Na, R2 = R3 =  $\beta$ -OH, R4 =  $\alpha$ -H) in 87% yield.

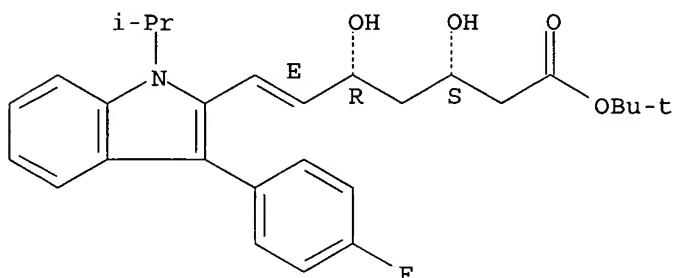
IT 129332-29-2P

RL: IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(process for preparation of statins with high syn to anti ratio via stereoselective ketone reduction)

RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



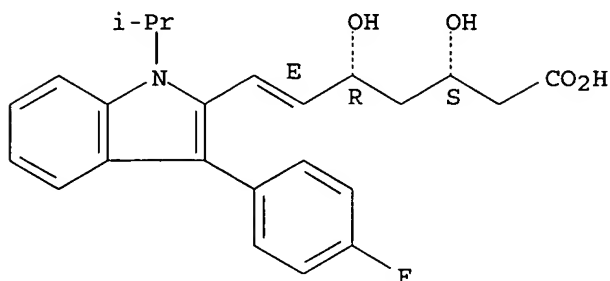
IT 93957-55-2P

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(process for preparation of statins with high syn to anti ratio via stereoselective ketone reduction)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



● Na

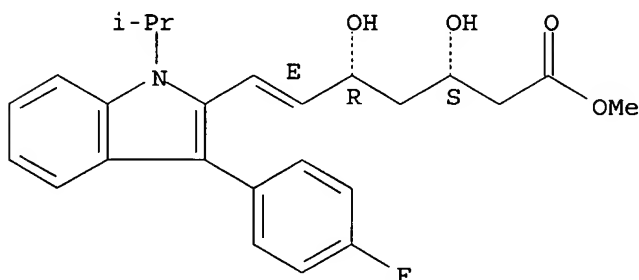
IT 93957-53-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(process for preparation of statins with high syn to anti ratio via stereoselective ketone reduction)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



L24 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:474955 CAPLUS

DOCUMENT NUMBER: 143:7598

TITLE: Saponification process for the preparation of fluvastatin sodium polymorphic crystal form XIV

INVENTOR(S): Frenkel, Gustavo; Gilboa, Eyal

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 871,916.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005119342	A1	20050602	US 2004-920112	20040817
US 2005038114	A1	20050217	US 2004-871916	20040618
PRIORITY APPLN. INFO.:			US 2003-479182P	P 20030618
			US 2003-483099P	P 20030630
			US 2003-485748P	P 20030710
			US 2003-493793P	P 20030811
			US 2003-507954P	P 20031003
			US 2004-545466P	P 20040219
			US 2004-871916	A2 20040618

AB A process for preparing a polymorphic crystalline form of fluvastatin sodium characterized by a powder X-ray diffraction pattern with peaks at 3.8, 11.1, 12.9, 17.8 and  $21.7 \pm 0.2$  degrees  $2\theta$  comprises: (A) combining a C1-4 alkyl ester of fluvastatin with acetonitrile at a ratio of about 1:4-6 kgL of the ester to acetonitrile, and with water at a ratio of about 1: 1.3-1:2 kgL of the ester to the water, to obtain a mixture; (B) combining sodium hydroxide with the mixture to saponify the ester obtaining a solution, where if aqueous sodium hydroxide is used, the water ratio does not exceed that provided in step (A); (C) combining addnl. acetonitrile with the solution to precipitate crystalline fluvastatin sodium; and (D) recovering the crystalline fluvastatin sodium.

IT 93957-53-0 129332-29-2

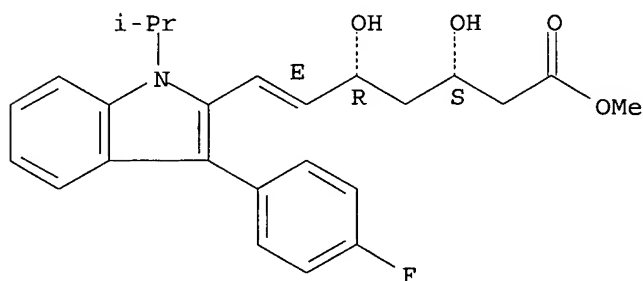
RL: RCT (Reactant); RACT (Reactant or reagent)

(in a saponification process for the preparation of fluvastatin sodium polymorphic crystal form XIV)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

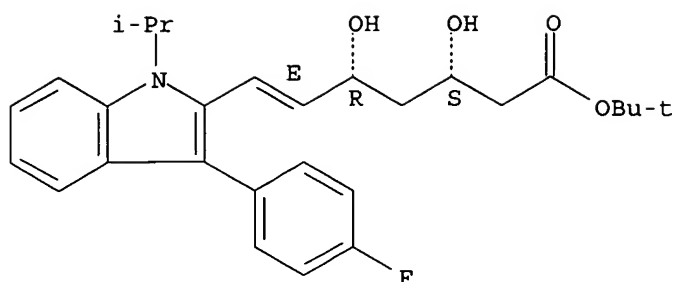


RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

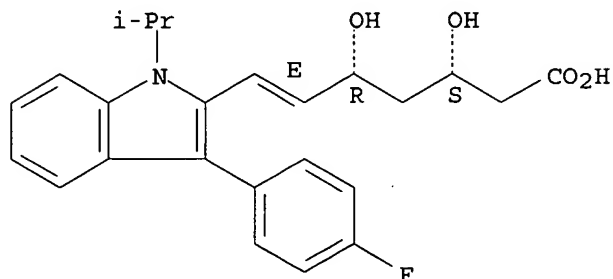
Relative stereochemistry.  
Double bond geometry as shown.





IT 93957-55-2P, Fluvastatin sodium  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (saponification process for the preparation of fluvastatin sodium  
 polymorphic  
 crystal form XIV)  
 RN 93957-55-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



● Na

L24 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2005:395268 CAPLUS  
 DOCUMENT NUMBER: 142:435812  
 TITLE: Preparation of a polymorph of fluvastatin sodium  
 INVENTOR(S): Frenkel, Gustavo; Gilboa, Eyal  
 PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva  
 Pharmaceuticals USA, Inc.  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040113	A1	20050506	WO 2004-US26673	20040817
WO 2005040113	C1	20050721		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005038114 A1 20050217 US 2004-871916 20040618  
 PRIORITY APPLN. INFO.: US 2003-507954P P 20031003  
 US 2004-545466P P 20040219  
 US 2004-871916 A 20040618  
 US 2003-479182P P 20030618  
 US 2003-483099P P 20030630  
 US 2003-485748P P 20030710  
 US 2003-493793P P 20030811

AB Provided are processes for preparing a polymorphic form of fluvastatin sodium with PXRD peaks at 3.8, 11.1, 12.9, 17.8 and 21.7 0.2 degrees two-theta.

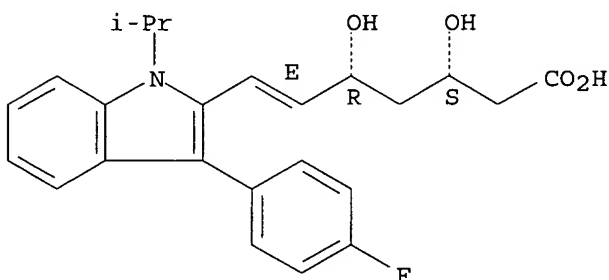
IT 93957-55-2P, Fluvastatin sodium 201541-53-9P,  
 Fluvastatin sodium monohydrate 851011-47-7P 851011-48-8P  
 851011-49-9P 851011-50-2P 851011-51-3P  
 851011-52-4P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of a polymorph of fluvastatin sodium)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

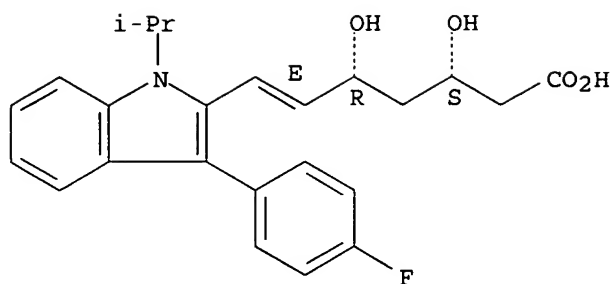


● Na

RN 201541-53-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, monosodium salt, monohydrate, (3R,5S,6E)-rel- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

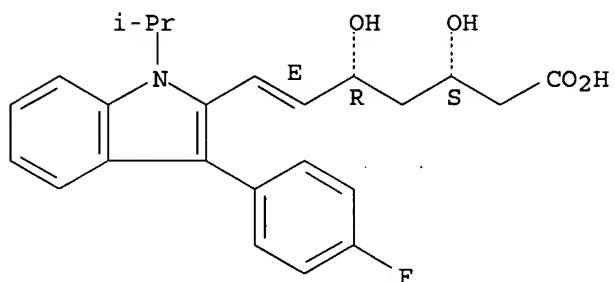


● Na

● H<sub>2</sub>O

RN 851011-47-7 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, hydrate (2:3), (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

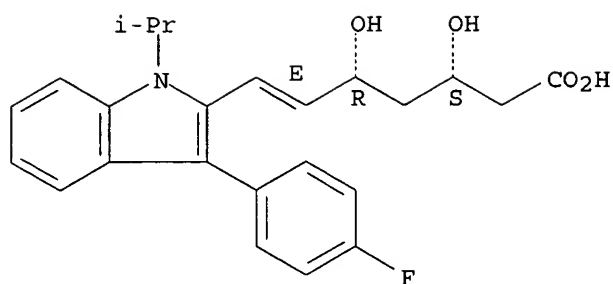


● Na

● 3/2 H<sub>2</sub>O

RN 851011-48-8 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, dihydrate, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

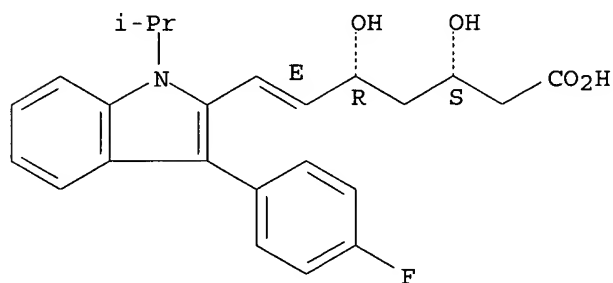


● Na

● 2 H<sub>2</sub>O

RN 851011-49-9 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, hydrate (2:5), (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

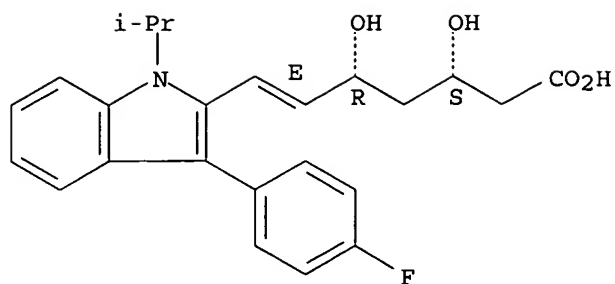


● Na

● 5/2 H<sub>2</sub>O

RN 851011-50-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, trihydrate, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



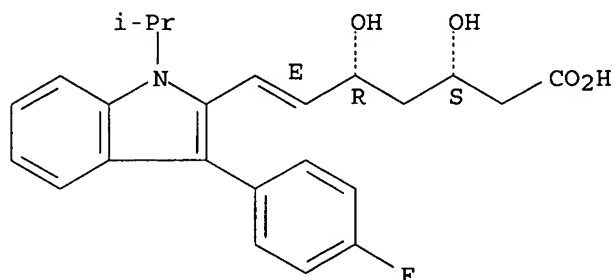
● Na

● 3 H<sub>2</sub>O

RN 851011-51-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, tetrahydrate, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



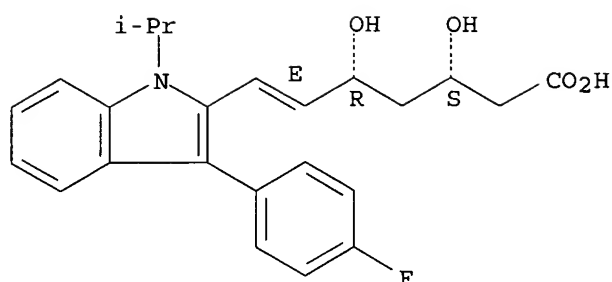
● Na

● 4 H<sub>2</sub>O

RN 851011-52-4 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, pentahydrate, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



● Na

●5 H<sub>2</sub>O

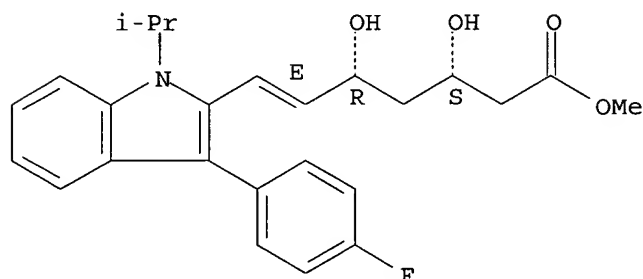
IT 93957-53-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of a polymorph of fluvastatin sodium)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1154669 CAPLUS

DOCUMENT NUMBER: 142:79939

TITLE: Preparation of fluvastatin sodium crystal forms for pharmaceuticals

INVENTOR(S): Revital, Lifshitz-Liron; Tamas, Koltai; Aronhime, Judith; Perlman, Nurit; Sharon, Avhar-Maydan

PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.

SOURCE: PCT Int. Appl., 284 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

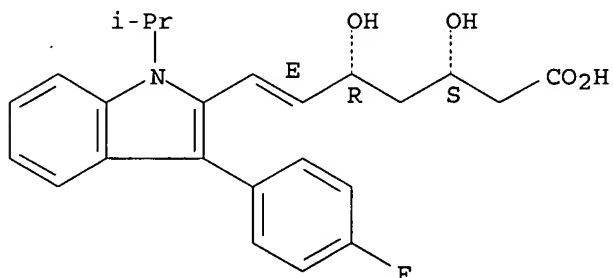
LANGUAGE: English

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004113292	A2	20041229	WO 2004-US19882	20040618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005032884	A1	20050210	US 2004-872089	20040618
PRIORITY APPLN. INFO.:			US 2003-479182P	P 20030618
			US 2003-483099P	P 20030630
			US 2003-485748P	P 20030710
			US 2003-493793P	P 20030811
			US 2003-507954P	P 20031003
			US 2004-545466P	P 20040219
AB Provided are crystal forms of fluvastatin sodium and processes for their preparation Thus, fluvastatin Me ester was dissolved in acetone and NaOH solution in acetone was added. The product, fluvastatin sodium crystal Form I was dried at 50°.				
IT 93957-55-2P, Fluvastatin sodium RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation of fluvastatin sodium crystal forms for pharmaceuticals)				
RN 93957-55-2 CAPLUS CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)				

Relative stereochemistry.  
Double bond geometry as shown.



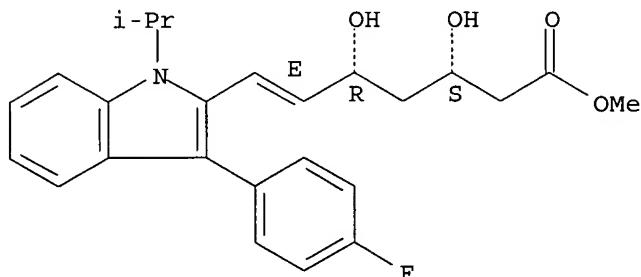
● Na

IT 93957-53-0 129332-29-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of fluvastatin sodium crystal forms for pharmaceuticals)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

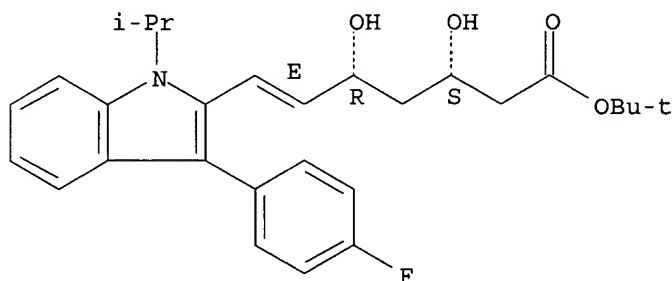
Relative stereochemistry.  
Double bond geometry as shown.



RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



L24 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1154668 CAPLUS

DOCUMENT NUMBER: 142:79938

TITLE: Preparation of different crystal forms of fluvastatin sodium for pharmaceuticals

INVENTOR(S): Revital, Lifshitz-Liron; Koltai, Tamas; Aronhime, Judith; Perlman, Nurit

PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.

SOURCE: PCT Int. Appl., 53 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004113291	A2	20041229	WO 2004-US19879	20040618
WO 2004113291	A3	20050414		



W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005032884 A1 20050210 US 2004-872089 20040618  
 PRIORITY APPLN. INFO.: US 2003-479182P P 20030618  
 US 2003-483099P P 20030630  
 US 2003-485748P P 20030710  
 US 2003-493793P P 20030811  
 US 2003-507954P P 20031003  
 US 2004-545466P P 20040219

AB Provided are polymorphic forms of fluvastatin sodium and processes for their preparation. Thus, fluvastatin sodium was suspended in a mixture of toluene

and hexane, the mixture was cooled and the product, a crystal form XIV of the drug, was obtained.

IT 93957-55-2P, Fluvastatin sodium

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

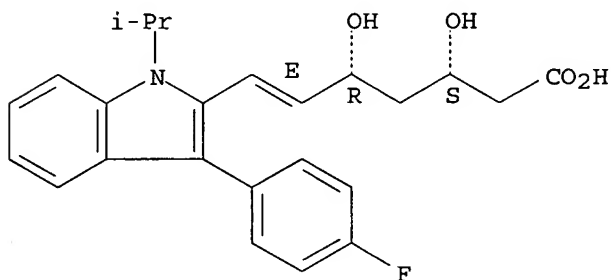
(preparation of different crystal forms of fluvastatin sodium for pharmaceuticals)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



● Na

IT 93957-53-0, Fluvastatin methyl ester 129332-29-2,

Fluvastatin tert.-butyl ester

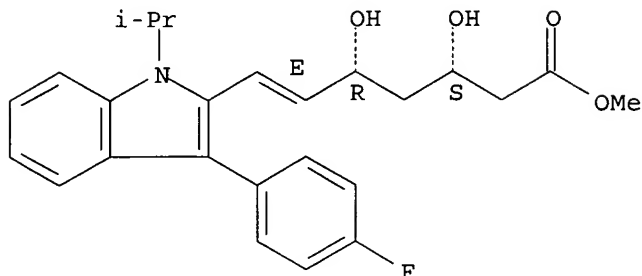
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of different crystal forms of fluvastatin sodium for pharmaceuticals)

RN 93957-53-0 CAPLUS

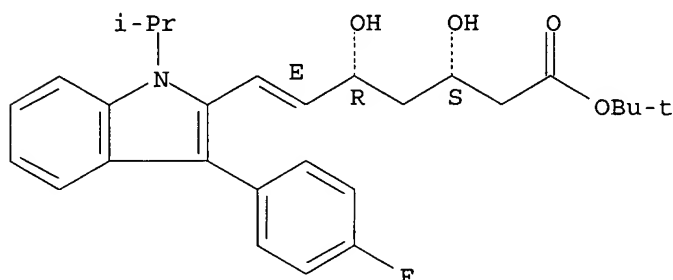
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 129332-29-2 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

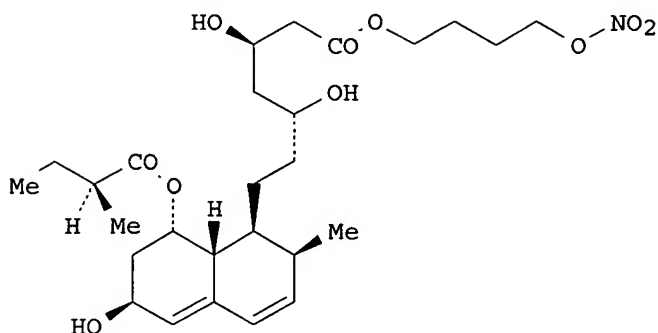


L24 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:1059168 CAPLUS  
DOCUMENT NUMBER: 142:38061  
TITLE: Preparation of nitrooxy derivatives of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as cholesterol-reducing agents with improved anti-inflammatory, antithrombotic and anti-platelet activity  
INVENTOR(S): Benedini, Francesca; Ongini, Ennio; Del Soldato, Piero  
PATENT ASSIGNEE(S): Nicox S. A., Fr.  
SOURCE: PCT Int. Appl., 53 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004105754	A1	20041209	WO 2004-EP50897	20040524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

US 2005165084 A1 20050728 US 2004-849561 20040520  
 PRIORITY APPLN. INFO.: EP 2003-101530 A 20030527  
 OTHER SOURCE(S): MARPAT 142:38061  
 GI



AB Nitrooxy derivs. of therapeutic agents, such as RCO-X-Y-ONO<sub>2</sub> [RCO = acyl residue of therapeutic agents, including statin acids, such as fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin, ACE inhibitors, angiotensin II receptor antagonists,  $\beta$ -adrenergic blockers, calcium channel blockers, antithrombotics and aspirin; X = O, S, NR<sub>1</sub>; Y = linking group, such as, alkylene or phenylene alone or in combination; R<sub>1</sub> = H, alkyl], with improved pharmacol. activity and enhanced tolerability were prepared for therapeutic use in treating and/or preventing several diseases, in particular coronary syndromes and neurodegenerative disorders and autoimmune disorders, as well as for reducing cholesterol levels. The vascular disorders for treatment include acute coronary syndromes, stroke, peripheral vascular diseases, disorders associated with endothelial dysfunction, peripheral ischemia, vascular complications in diabetic patients and atherosclerosis. The neurodegenerative diseases for treatment include Alzheimer's disease, Parkinson's disease and multiple sclerosis. Thus, ester I was prepared via an esterification reaction of pravastatin sodium with 1,4-dibromobutane in DMF and subsequent treatment of the resulting 4-bromobutanyl pravastatin ester with silver nitrate in MeCN. The prepared nitrooxy statin derivs. were assayed for their ability to induce vasorelaxation, for their effect in vitro on inflammatory pathways, for activity on peripheral vascular disease, for effect on leukocyte adhesion, for antithrombotic activity, for anti-platelet activity, and for inhibition of tissue factor expression.

IT 803728-75-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

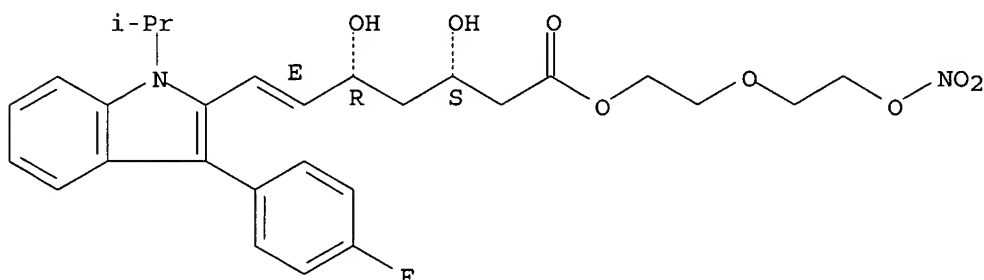
(claimed compound; preparation of nitrooxy derivs. of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as

cholesterol-reducing agents with improved anti-inflammatory,  
antithrombotic and anti-platelet activity)

RN 803728-75-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
3,5-dihydroxy-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (3R,5S,6E)-rel- (9CI)  
(CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



IT 733034-56-5P 803728-42-9P 803728-43-0P  
803728-44-1P

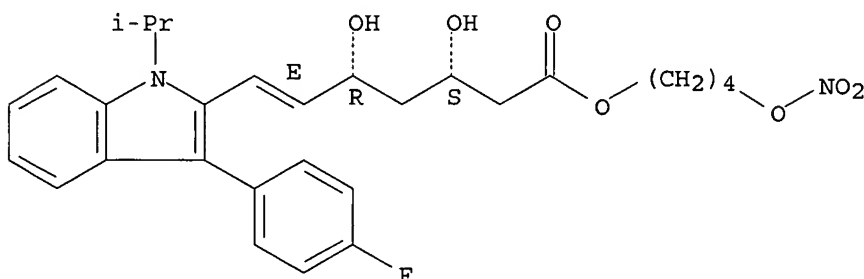
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)

(preparation of nitrooxy derivs. of fluvastatin, pravastatin, cerivastatin,  
atorvastatin and rosuvastatin as cholesterol-reducing agents with  
improved anti-inflammatory, antithrombotic and anti-platelet activity)

RN 733034-56-5 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
3,5-dihydroxy-, 4-(nitrooxy)butyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX  
NAME)

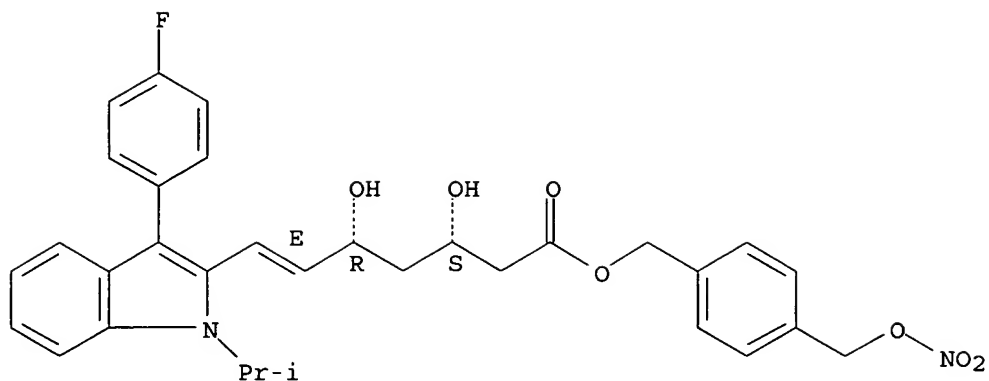
Relative stereochemistry.  
Double bond geometry as shown.



RN 803728-42-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
3,5-dihydroxy-, [4-[(nitrooxy)methyl]phenyl]methyl ester, (3R,5S,6E)-rel-  
(9CI) (CA INDEX NAME)

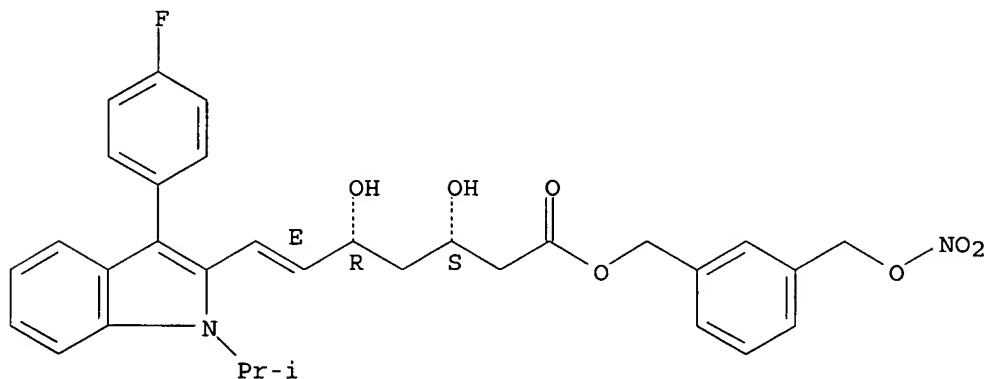
Relative stereochemistry.  
Double bond geometry as shown.



RN 803728-43-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, [3-[(nitrooxy)methyl]phenyl]methyl ester, (3R,5S,6E)-rel-(9CI) (CA INDEX NAME)

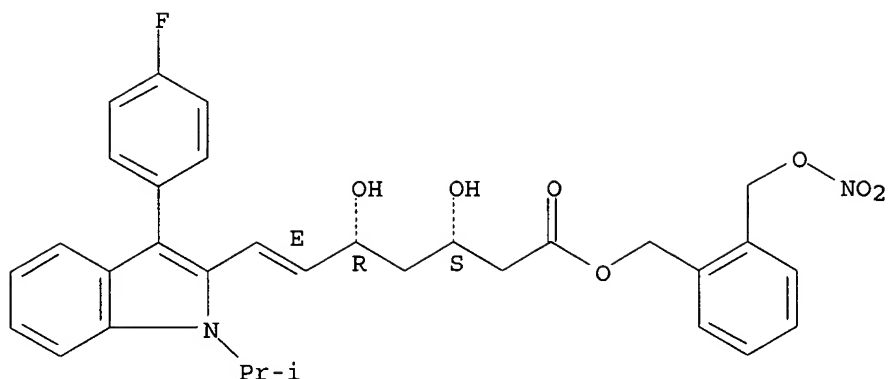
Relative stereochemistry.  
Double bond geometry as shown.



RN 803728-44-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, [2-[(nitrooxy)methyl]phenyl]methyl ester, (3R,5S,6E)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



IT 93957-55-2, Fluvastatin sodium

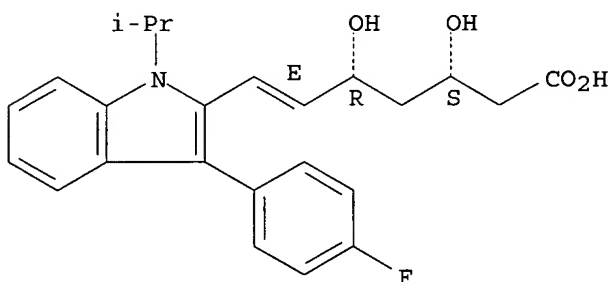
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of nitrooxy derivs. of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as cholesterol-reducing agents with improved anti-inflammatory, antithrombotic and anti-platelet activity)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



● Na

IT 803728-87-2P 803728-88-3P 803728-89-4P

803728-90-7P

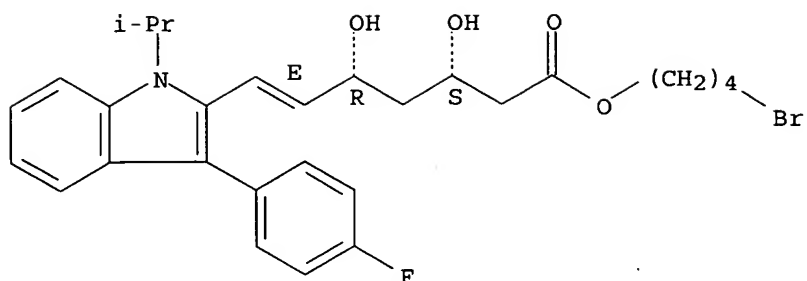
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of nitrooxy derivs. of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as cholesterol-reducing agents with improved anti-inflammatory, antithrombotic and anti-platelet activity)

RN 803728-87-2 CAPLUS

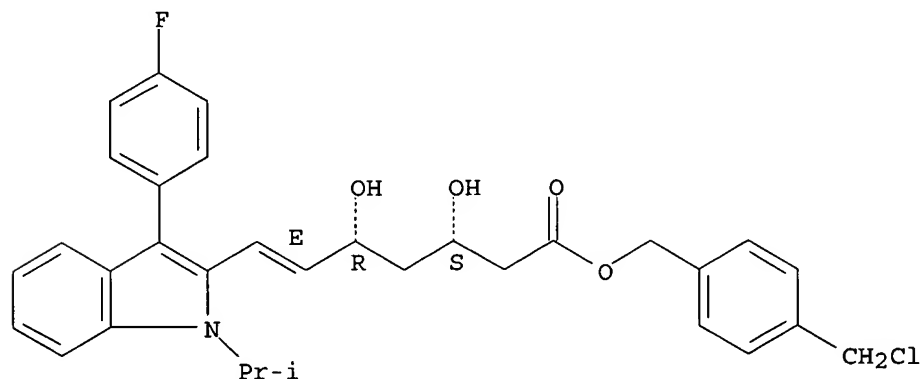
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 4-bromobutyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



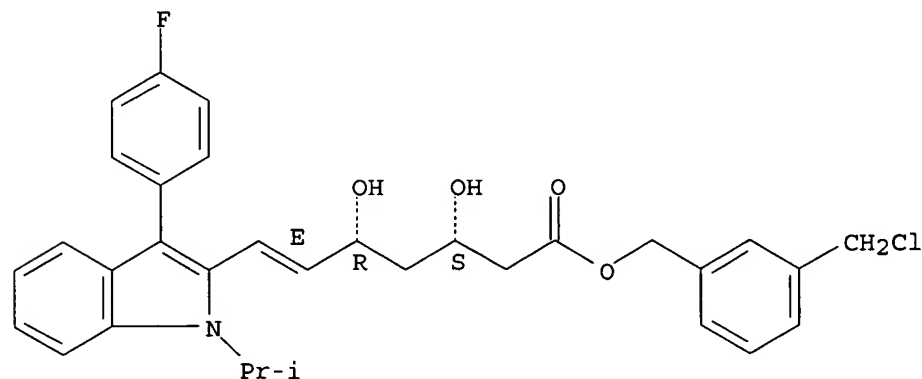
RN 803728-88-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, [4-(chloromethyl)phenyl]methyl ester, (3R,5S,6E)-rel-  
 (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



RN 803728-89-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, [3-(chloromethyl)phenyl]methyl ester, (3R,5S,6E)-rel-  
 (9CI) (CA INDEX NAME)

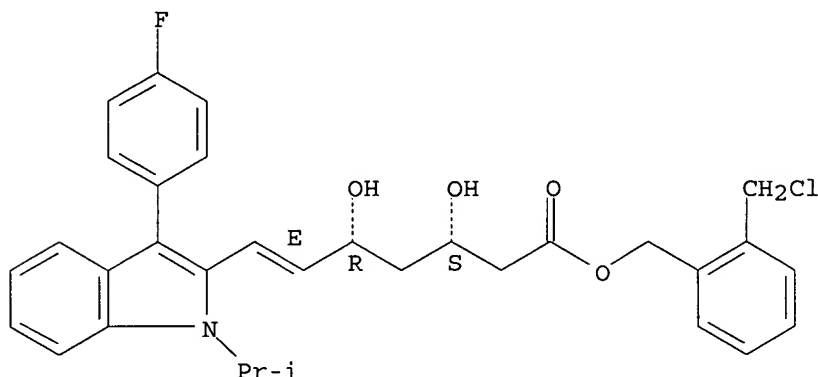
Relative stereochemistry.  
 Double bond geometry as shown.



RN 803728-90-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, [2-(chloromethyl)phenyl]methyl ester, (3R,5S,6E)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:965217 CAPLUS

DOCUMENT NUMBER: 141:395334

TITLE: Preparation of polymorphic crystalline fluvastatin sodium

INVENTOR(S): Suri, Sanjay; Sarin, Gurdeep Singh

PATENT ASSIGNEE(S): Morepen Laboratories Ltd., India

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096765	A2	20041111	WO 2004-IN121	20040430
WO 2004096765	A3	20050127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2003-DE656 A 20030501

OTHER SOURCE(S): CASREACT 141:395334

AB Crystalline polymorphic forms of fluvastatin sodium and its hydrates are prepared

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



by the reaction of the Me ester of fluvastatin with sodium hydroxide followed by the addition of aliphatic ethers (e.g., THF) as an antisolvent to facilitate precipitating the crystal polymorph of fluvastatin sodium.

IT 93957-53-0

RL: RCT (Reactant); RACT (Reactant or reagent)

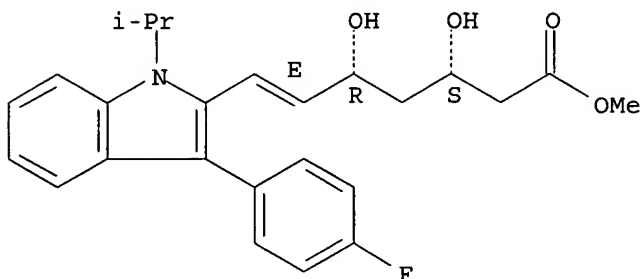
(in the preparation of polymorphic crystalline fluvastatin sodium)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 93957-55-2P, Fluvastatin sodium 201541-53-9P,

Fluvastatin sodium monohydrate

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

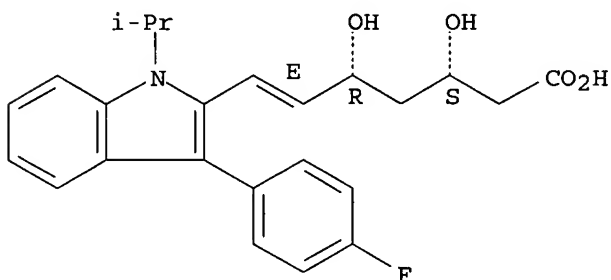
(preparation of polymorphic crystalline fluvastatin sodium)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



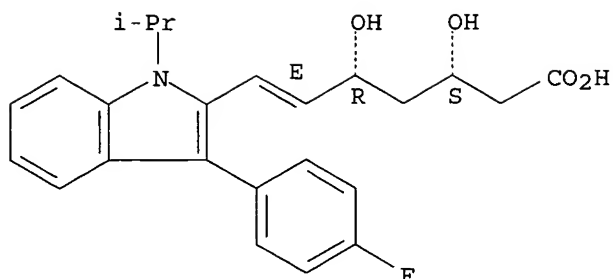
● Na

RN 201541-53-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, monohydrate, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



● Na

● H<sub>2</sub>O

L24 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:927170 CAPLUS

DOCUMENT NUMBER: 141:395414

TITLE: Method for separation of optically active  
aryldihydroxyheptenoic acid esters

INVENTOR(S): Kudo, Keiko; Tachibana, Kozo; Murazumi, Koichi

PATENT ASSIGNEE(S): Daicel Chemical Industries Ltd., Japan

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

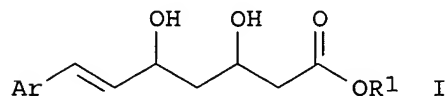
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004094377	A1	20041104	WO 2004-JP5924	20040423
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: JP 2003-119819 A 20030424

OTHER SOURCE(S): MARPAT 141:395414

GI



AB An optically active aryldihydroxyheptenoic acid ester having an aromatic group (I) [wherein Ar = (un)substituted or optionally fused carbocyclic or heterocyclic aromatic group; R1 = C1-20 alkyl, Ph, C7-18 aralkyl] is separated from a solution containing a mixture of optical isomers of the

dihydroxyheptenoic

acid ester by liquid chromatog. with a packing material constituted of a carrier and a polysaccharide derivative supported on the carrier. The polysaccharide derivative is a polysaccharide in which the hydrogen atoms constituting the hydroxyl and amino groups are partially or all replaced by one or more kinds of groups selected from among carbamoyl groups monosubstituted with aromatic groups having specific alkyl groups and benzoyl groups having specific alkyl groups. According to the invention, optically active aryldihydroxyheptenoic acid esters can be separated more distinctly. Thus, (3R,5S,6E)-rel-7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid monosodium salt was extracted from Lescol (NOVARTIS Pharmaceutical Corp.) by CHCl<sub>3</sub> at reflux and converted into (3R,5S,6E)-rel-7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid Me ester (II) by treatment with Me iodide in DMF in the presence of Li<sub>2</sub>CO<sub>3</sub>. Cellulose (50 g) was suspended in pyridine, treated with 310 g 4-isopropylphenyl isocyanate, and refluxed for 24 h to give cellulose tris(4-isopropylphenylcarbamate) (III) which was dissolved in acetone, and uniformly poured onto silica gel (average diameter 20 µm), followed by evaporation of the solvent to give III-supported on silica gel as a packing material. The latter packing material was packed in a stainless steel column (0.46 cm inner diameter X 25 cm length) to give a liquid chromatog. column for separation of optical

isomers.

Optical isomers of II were separated using the column obtained above and hexane/2-propanol (80/20 volume/volume ratio) as the mobile phase with

separation

coefficient of 2.20.

IT 93957-53-0P, (3R,5S,6E)-rel-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid methyl ester

615263-37-1P, (3R,5S,6E)-rel-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid ethyl ester

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

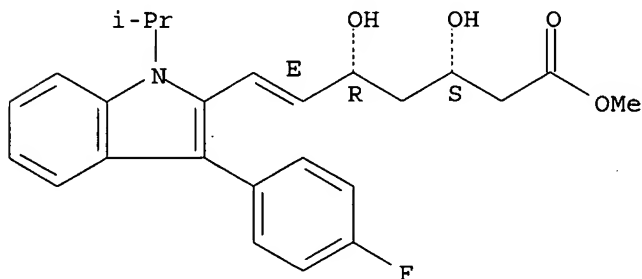
(separation of optically active aryldihydroxyheptenoic acid esters by liquid chromatog. resolution using polysaccharide carbamates coated on silica gel)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

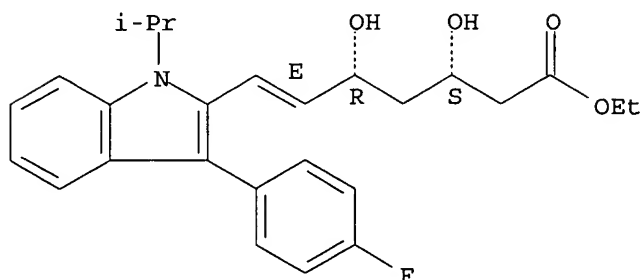
Double bond geometry as shown.



RN 615263-37-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



IT 786710-21-2P, (3R,5S,6E)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid methyl ester

786710-22-3P, (3S,5R,6E)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid methyl ester

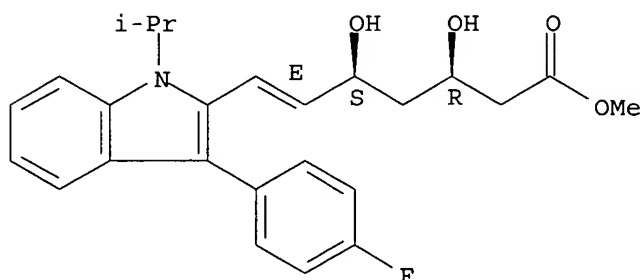
RL: PUR (Purification or recovery); PREP (Preparation)

(separation of optically active aryldihydroxyheptenoic acid esters by liquid chromatog. resolution using polysaccharide carbamates coated on silica gel)

RN 786710-21-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

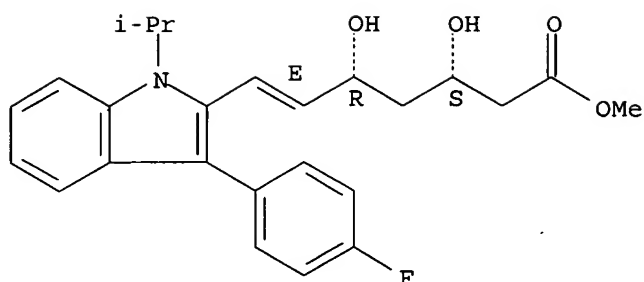
Absolute stereochemistry.  
Double bond geometry as shown.



RN 786710-22-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

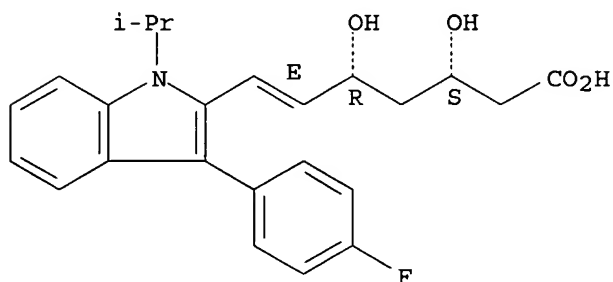


IT 93957-55-2P, (3R,5S,6E)-rel-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid monosodium salt  
 RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (separation of optically active aryldihydroxyheptenoic acid esters by liquid chromatog. resolution using polysaccharide carbamates coated on silica gel)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



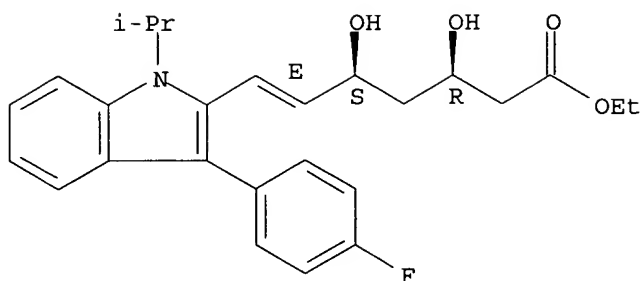
● Na

IT 786710-24-5P, (3R,5S,6E)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid ethyl ester  
 786710-25-6P, (3S,5R,6E)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid ethyl ester  
 RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)  
 (separation of optically active aryldihydroxyheptenoic acid esters by liquid chromatog. resolution using polysaccharide carbamates coated on silica gel)

RN 786710-24-5 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

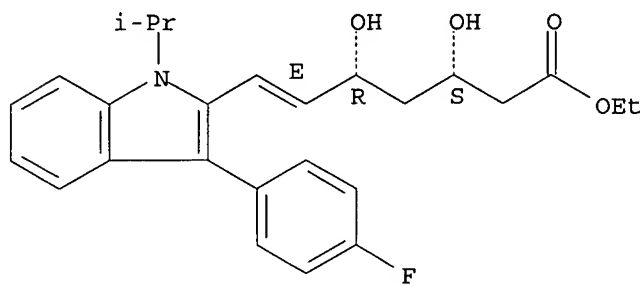


RN 786710-25-6 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:1006762 CAPLUS

DOCUMENT NUMBER: 140:47480

TITLE: Calcium salts of indole derived statins

INVENTOR(S): Chen, Guang-Pei; Kapa, Prasad Koteswara; Sutton, Paul Allen

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105837	A1	20031224	WO 2003-EP6195	20030612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				

CA 2486557 AA 20031224 CA 2003-2486557 20030612  
 EP 1515717 A1 20050323 EP 2003-740234 20030612  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 PRIORITY APPLN. INFO.: US 2002-388318P P 20020613  
 WO 2003-EP6195 W 20030612

OTHER SOURCE(S): MARPAT 140:47480

AB The present invention provides calcium salts of indole-derived statins. More specifically, the invention provides fluvastatin calcium (I), in a highly crystalline form. Furthermore, the present invention is directed to methods for the preparation of I, and to pharmaceutical compns. comprising the crystalline form. The I is effective for the prevention and/or treatment of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia, and atherosclerosis.

IT 194934-96-8 634902-72-0 634902-73-1

RL: RCT (Reactant); RACT (Reactant or reagent)

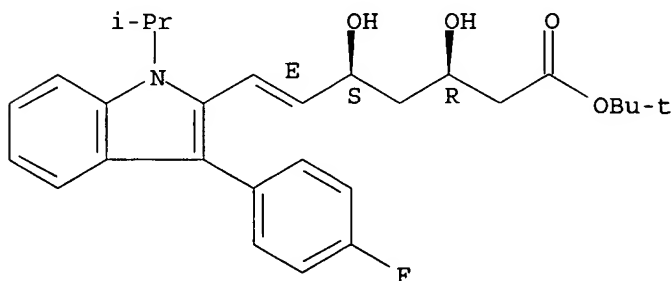
(preparation of crystalline fluvastatin Ca salt and blood cholesterol-lowering effects thereof)

RN 194934-96-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

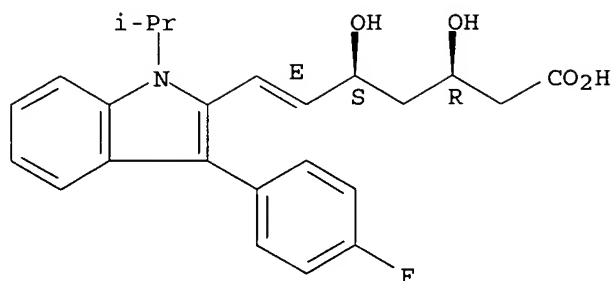


RN 634902-72-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monolithium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

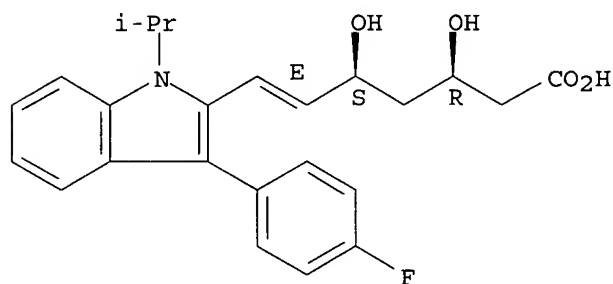
Double bond geometry as shown.



● Li

RN 634902-73-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monopotassium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.

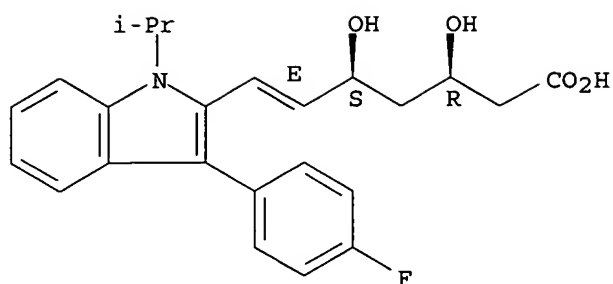


● K

IT 94061-80-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of crystalline fluvastatin Ca salt and blood cholesterol-lowering effects thereof)  
 RN 94061-80-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.





● Na

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STM

ACCESSION NUMBER: 2003:678800 CAPLUS

DOCUMENT NUMBER: 139:214343

TITLE: Process for the manufacture of HMG-CoA reductase inhibitory mevalonic acid derivatives

INVENTOR(S): Sedelmeier, Gottfried; Mathes, Christian

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

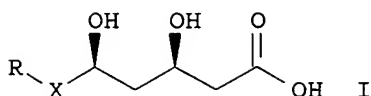
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003070717	A1	20030828	WO 2003-EP1738	20030220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
CA 2473075	AA	20030823	CA 2003-2473075	20030220
EP 1478640	A1	20041124	EP 2003-714750	20030220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003007801	A	20041221	BR 2003-7801	20030220
JP 2005520818	T2	20050714	JP 2003-569624	20030220
US 2005159480	A1	20050721	US 2003-504655	20030220
PRIORITY APPLN. INFO.:			GB 2002-4129	A 20020221
			WO 2003-EP1738	W 20030220
OTHER SOURCE(S):			MARPAT 139:214343	
GI				



AB Mevalonic acid derivs. I [R = cyclic residue; X = CH<sub>2</sub>CH<sub>2</sub>, CH:CH] are prepared by treating R<sub>1</sub>R<sub>2</sub>R<sub>3</sub>P:CHCOCH<sub>2</sub>CO<sub>2</sub>R<sub>4</sub> [R<sub>1</sub>-R<sub>3</sub> = (un)substituted Ph; R<sub>4</sub> = aliphatic, cycloaliph., aromatic] with RCHO, reducing the resulting RCH:CHCOCH<sub>2</sub>CO<sub>2</sub>R<sub>4</sub> in presence of a chiral metal BINAP or TsDPEN catalyst, treating the resulting alc. with an ester enolate, reducing the second oxo group, and hydrolyzing the ester group. Thus, ClCH<sub>2</sub>COCH<sub>2</sub>CO<sub>2</sub>Et was treated with PPh<sub>3</sub> to give Ph<sub>3</sub>P:CHCOCH<sub>2</sub>CO<sub>2</sub>Et which was treated with 2-cyclopropyl-4-(4-fluorophenyl)quinoline-3-carboxaldehyde to give (E)-5-[2-cyclopropyl-4-(4-fluorophenyl)quinolin-3-yl]-3-oxopent-4-enoic acid Et ester. This ester was reduced with Ru[(1R,2R)-p-TsNCHPhCHPhNH] (η-p-cymene) and treated with Me<sub>3</sub>COAc to give (E)-(S)-7-[2-cyclopropyl-4-(4-fluorophenyl)quinolin-3-yl]-5-hydroxy-3-oxohept-4-enoic acid tert.-Bu ester which was reduced with MeOBt<sub>2</sub> and hydrolyzed to give (E)-(3R,5S)-7-[2-cyclopropyl-4-(4-fluorophenyl)quinolin-3-yl]-3,5-dihydroxyhept-4-enoic acid calcium salt.

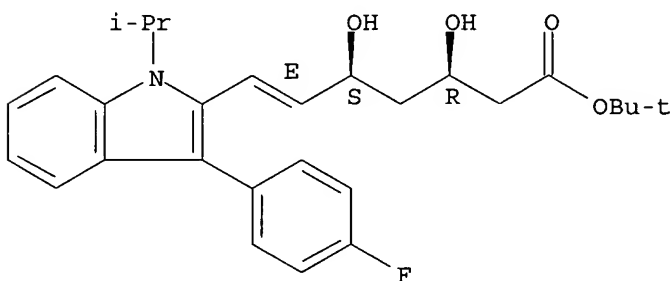
IT 194934-96-8P 194935-00-7P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(process for the manufacture of HMG-CoA reductase inhibitory mevalonic acid derivs.)

RN 194934-96-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

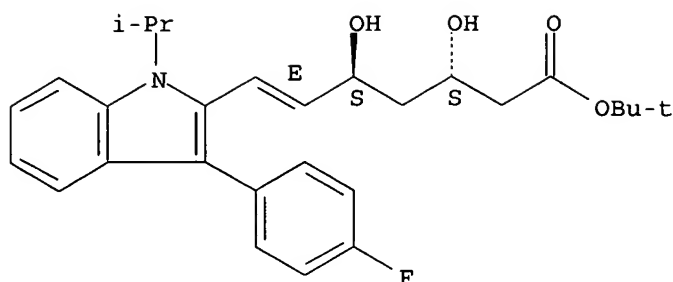
Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



RN 194935-00-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3S,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



IT 94061-80-0P

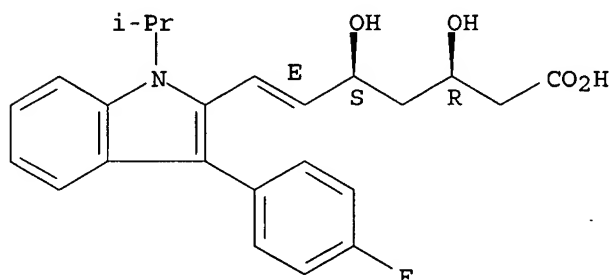
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for the manufacture of HMG-CoA reductase inhibitory mevalonic acid derivs.)

RN 94061-80-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



● Na

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:173584 CAPLUS

DOCUMENT NUMBER: 138:221469

TITLE: Process for the preparation of indole derivatives

INVENTOR(S): Wolleb, Heinz; Wolleb, Annemarie; Van Der Schaaf, Paul  
Adriaan; Kolly, Roman; End, Nicole

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003018555            A1            20030306            WO 2002-EP9046            20020813  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG  
CA 2455842            AA            20030306            CA 2002-2455842            20020813  
EP 1423365            A1            20040602            EP 2002-796227            20020813  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
CN 1545502            A            20041110            CN 2002-816435            20020813  
JP 2005503393            T2            20050203            JP 2003-523219            20020813  
US 2005032875            A1            20050210            US 2004-487269            20040219  
PRIORITY APPLN. INFO.:            EP 2001-810817            A            20010822  
   WO 2002-EP9046            W            20020813  
OTHER SOURCE(S):            CASREACT 138:221469; MARPAT 138:221469  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB A process for the preparation of indole derivs. I [R1 = (un)substituted C1-8-alkyl; R2, R3, R4, R5 = H, (un)substituted C1-8-alkyl, C1-8-alkoxy, phenoxy or benzyloxy, halogen; Y1, Y2 = H, protective group; Y1Y2 = protecting bridge; X1 = H, an organic radical, a cation], in which process a compound II [Z1 = leaving group], is reacted, in the presence of a catalytically effective amount of a palladium catalyst, with a compound III [R6 = H, Br, Cl, I, OSO2CF3, COCl, B(OH)2, a mono- or di-ester derived from -B(OH)2; Y3, Y4 = protecting group; or Y3Y4 = protecting bridge] to form a compound IV and if desired the radicals Y3 and Y4 are converted into the radicals Y1 and Y2 where Y1 and Y2 are hydrogen. Thus, V was prepared from 3-(4-fluorophenyl)-1-isopropylindole via regioselective bromination, reaction with 2-ethoxy-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, palladium-catalyzed coupling with dioxanylacetate VI, deprotection and saponification

IT 129332-29-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

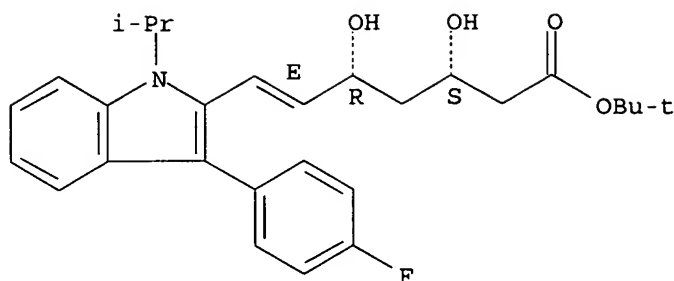
(preparation and saponification of; preparation of indole derivs. via palladium-catalyzed coupling reactions with boronic acid esters)

RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 93957-55-2P

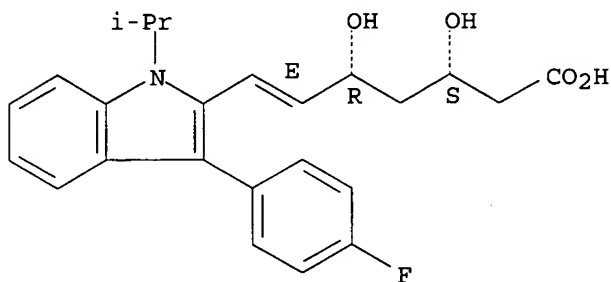
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of indole derivs. via palladium-catalyzed coupling reactions  
 with boronic acid esters)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
 3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



● Na

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:886062 CAPLUS

DOCUMENT NUMBER: 136:5904

TITLE: Process for the preparation of indole derivatives and  
 intermediates of the process

INVENTOR(S): Wolleb, Annemarie; Wolleb, Heinz

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
WO 2001092223	A1	20011206	WO 2001-EP5667	20010517

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

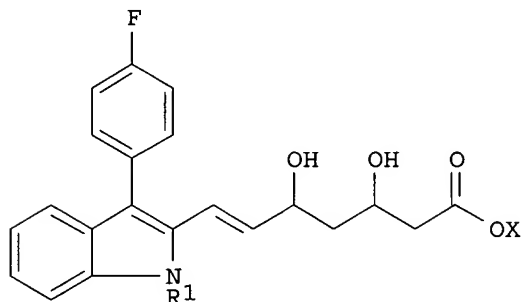
CA 2407862 AA 20011206 CA 2001-2407862 20010517  
 AU 2001074049 A5 20011211 AU 2001-74049 20010517  
 EP 1284964 A1 20030226 EP 2001-940495 20010517

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003535077 T2 20031125 JP 2002-500838 20010517  
 US 2003166946 A1 20030904 US 2002-296106 20021122  
 US 6743926 B2 20040601  
 US 2004176614 A1 20040909 US 2004-803705 20040318

PRIORITY APPLN. INFO.: EP 2000-810460 A 20000526  
 WO 2001-EP5667 W 20010517  
 US 2002-296106 A3 20021122

OTHER SOURCE(S): CASREACT 136:5904; MARPAT 136:5904  
 GI



AB A process for the preparation of the title compds. I [R1 = C1-C6 alkyl; X = H, hydrocarbon radical or a cation] is reported. E.g., sodium erythro-(±)-(E)-7-[3-(4-fluorophenyl)-1-isopropyl-1H-indol-2-yl]-3,5-dihydroxyhept-6-enoate was prepared in a multistep synthesis from 3-(4-fluorophenyl)-1-isopropyl-1H-indole.

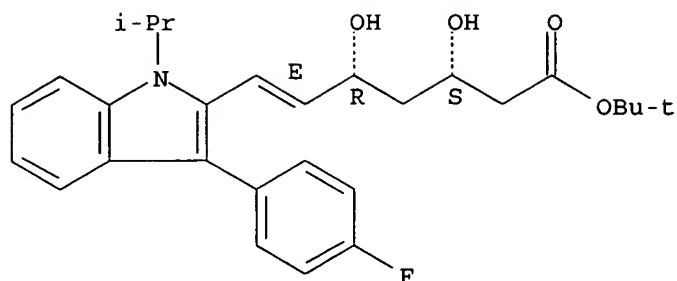
IT **129332-29-2P**

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of indole derivs.)

RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



IT 93957-55-2P 194934-96-8P 194935-03-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

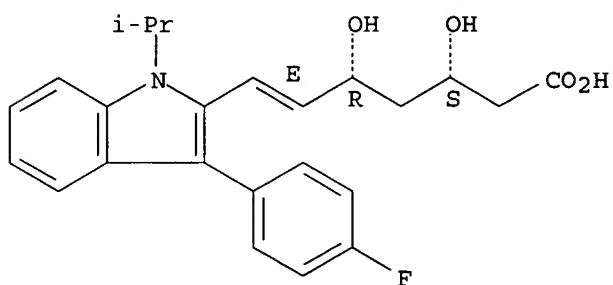
(preparation of indole derivs.)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



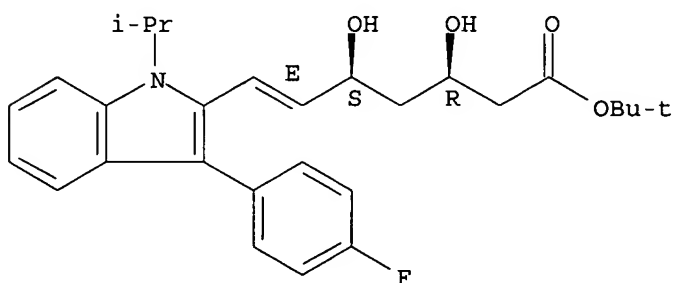
● Na

RN 194934-96-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

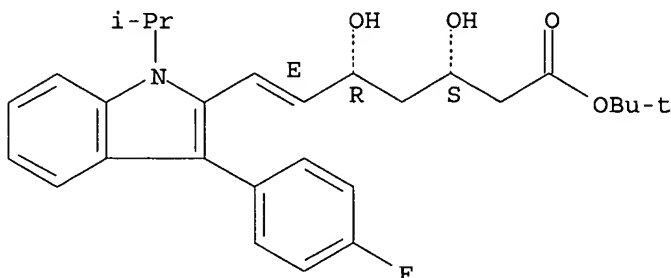
Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



RN 194935-03-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:100136 CAPLUS

DOCUMENT NUMBER: 132:260639

TITLE: Mechanism of antioxidative activity of fluvastatin-determination of the active position

AUTHOR(S): Nakamura, Takashi; Nishi, Hiroyuki; Kokusenya, Yoshio; Hirota, Kenichi; Miura, Yozo

CORPORATE SOURCE: Analytical Chemistry Department, Product and Technology Development Laboratory, Tanabe Seiyaku Co., Ltd., Osaka, 532-8505, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(2), 235-237

CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To clarify the mechanism of action for the antioxidative activity of fluvastatin sodium (FLV, (+)-sodium (3RS, 5RS, 6E)-7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptanoate) and its derivs., reaction of the corresponding Me ester of FLV with di-tert-Bu diperoxyoxalate was examined, and the corresponding keto derivative was isolated from the reaction mixture. On the basis of this result, it was concluded that the active site is the allylic carbon conjugated with the indole ring.

IT 93957-53-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)

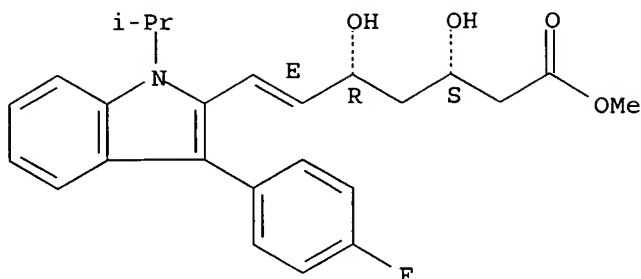
(mechanism of antioxidative activity of fluvastatin and determination of active position by reaction of the Me ester with di-tert-Bu diperoxyoxalate)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.





IT 93957-55-2, Fluvastatin sodium

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mechanism of antioxidative activity of fluvastatin and determination of active

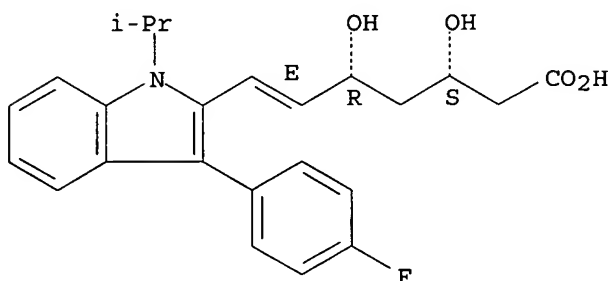
position by reaction of the Me ester with di-tert-Bu diperoxyoxalate)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



● Na

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:70157 CAPLUS

DOCUMENT NUMBER: 128:140577

TITLE: Synthesis of carbon-14 labeled fluvastatin (Lescol)

AUTHOR(S): Tang, Y. S.; Jones, Lawrence; Sunay, Ustun B.

CORPORATE SOURCE: Chemical Research & Development Department, Novartis Pharmaceutical Corporation, Hanover, NJ, 07936, USA

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (1998), 41(1), 1-7

CODEN: JLCRD4; ISSN: 0362-4803

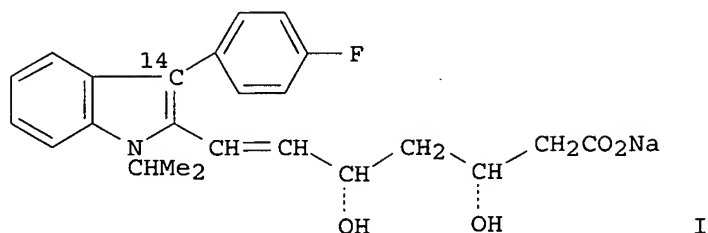
PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



AB [R\*,S\*]-(±)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl-3-<sup>14</sup>C]-3,5-dihydroxy-6-heptenoic acid sodium salt (labeled fluvastatin, I) was prepared from [<sup>14</sup>C]bromoacetyl chloride in a six-step synthesis with an overall radiochem. yield of 13.2%. This synthetic route was chosen because it puts the label in the metabolically stable 3-position of the indole ring.

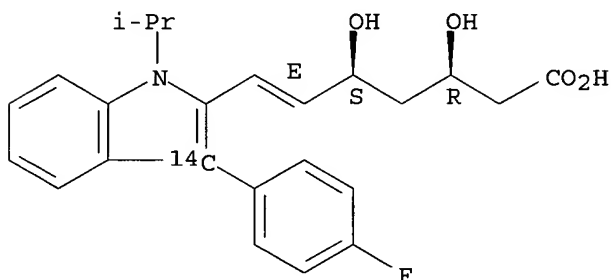
IT 202402-41-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 202402-41-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl-3-<sup>14</sup>C]-3,5-dihydroxy-, monosodium salt, (R\*,S\*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



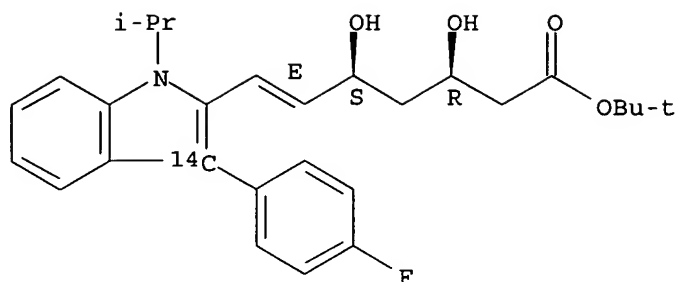
IT 202402-39-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of carbon-14 labeled fluvastatin)

RN 202402-39-9 CAPLUS

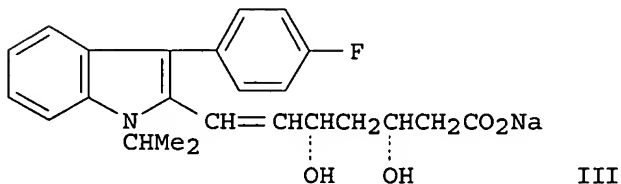
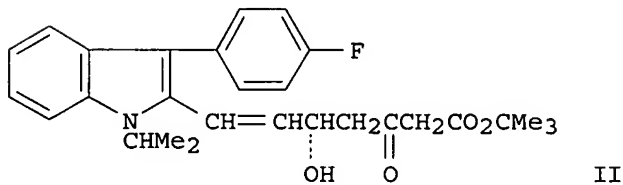
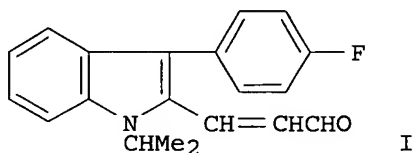
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl-3-<sup>14</sup>C]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (R\*,S\*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1997:535638 CAPLUS  
 DOCUMENT NUMBER: 127:220543  
 TITLE: Asymmetric synthesis of 3,5-dihydroxy-6(E)-heptenoate-containing HMG-CoA reductase inhibitors  
 AUTHOR(S): Tempkin, Orin; Abel, Stephan; Chen, Chung-Pin; Underwood, Russell; Prasad, Kapa; Chen, Kau-Ming; Repic, Oljan; Blacklock, Thomas J.  
 CORPORATE SOURCE: Process RandD, Chemical and Analytical Development, Novartis Pharmaceuticals Corporation, East Hanover, NJ, 07936, USA  
 SOURCE: Tetrahedron (1997), 53(31), 10659-10670  
 CODEN: TETRAB; ISSN: 0040-4020  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 127:220543  
 GI



AB A one-pot conversion of aldehyde I to hydroxy oxo ester II with high enantioselection, culminating in a practical asym. synthesis of the (3R,5S) isomer (III) of the antihyperlipoproteinemic agent fluvastatin is described. All four 3,5-dihydroxy-6(E)-heptenoate stereoisomers were prepared in enantiopure form starting from II, utilizing selective reduction and

oxidation methods.

IT 194934-96-8P 194934-98-0P 194935-00-7P  
194935-03-0P

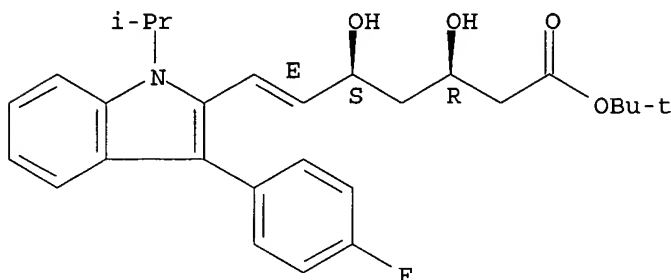
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(asym. synthesis of 3,5-dihydroxy-6(E)-heptenoate-containing HMG-CoA reductase inhibitors)

RN 194934-96-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

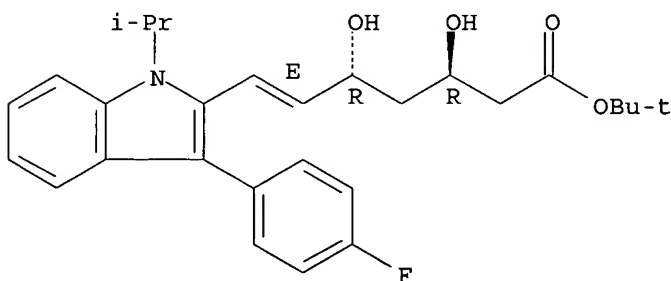
Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



RN 194934-98-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, [R-[R\*,R\*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

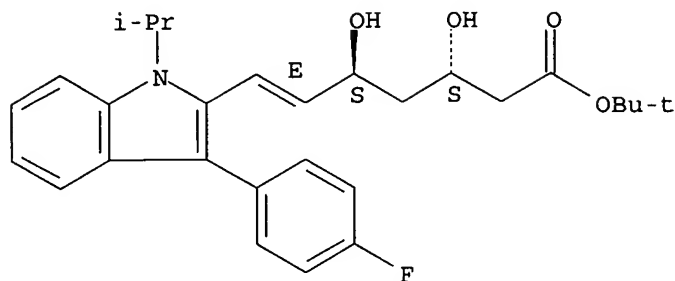


RN 194935-00-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3S,5S,6E)- (9CI) (CA INDEX NAME)

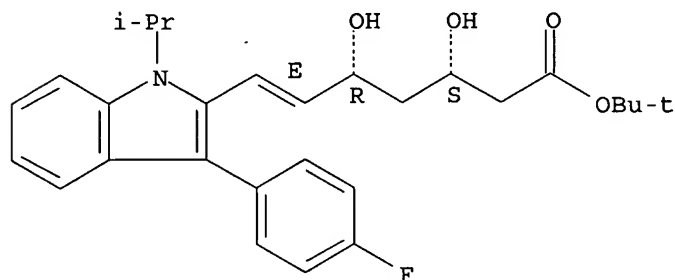
Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



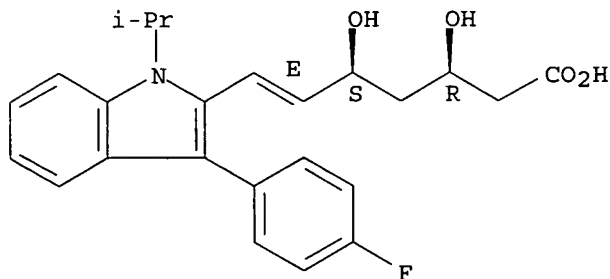
RN 194935-03-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.



IT 94061-80-0P 94061-81-1P 194934-99-1P  
 194935-01-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 94061-80-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.

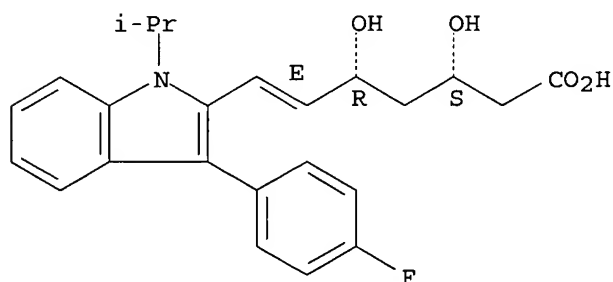


● Na

RN 94061-81-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.

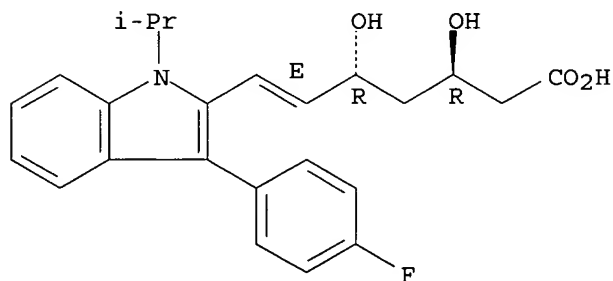


● Na

RN 194934-99-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R-[R\*,R\*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

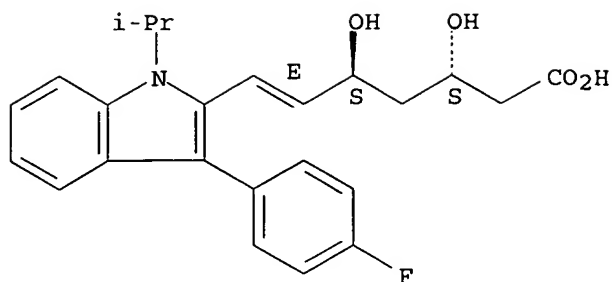


● Na

RN 194935-01-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [S-[R\*,R\*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



● Na

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:449425 CAPLUS

DOCUMENT NUMBER: 115:49425

TITLE: Pyrroloquinoline compounds

INVENTOR(S): Matsuo, Masaaki; Manabe, Takashi; Okumura, Hiroyuki;

Matsuda, Hiroshi; Fujii, Naoaki

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 114 pp.

CODEN: EPXXDW

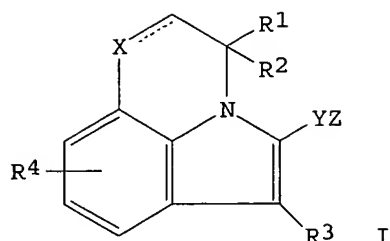
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 414023	A2	19910227	EP 1990-115042	19900804
EP 414023	A3	19911106		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5164400	A	19921117	US 1990-552127	19900713
AU 9060012	A1	19910228	AU 1990-60012	19900731
ZA 9006102	A	19910529	ZA 1990-6102	19900802
CA 2023726	AA	19910223	CA 1990-2023726	19900821
NO 9003666	A	19910225	NO 1990-3666	19900821
CN 1049663	A	19910306	CN 1990-107135	19900821
HU 55015	A2	19910429	HU 1990-5089	19900821
JP 03086882	A2	19910411	JP 1990-221750	19900822
PRIORITY APPLN. INFO.:			GB 1989-19091	A 19890822
			GB 1990-3252	A 19900213
OTHER SOURCE(S):			MARPAT 115:49425	
GI				



AB The title 3-hydroxy-3-methylglutaryl-CoA reductase inhibitors I (R1, R2 = H, lower alkyl, R3 = (un)substituted aryl, heteroaryl, R4 = H, halogen, lower alkyl, X = CH2, CH, O, S, SO, SO2, Y = CH2CH2, CH:CH, Z = CH(OH)CH2CH(OH)CH2CO2Na, 6-oxo-4-hydroxytetrahydro-2H-pyran-2-yl) were prepared. The ring system was prepared by alkylation of a nitrogen-containing heterocycle with an  $\alpha$ -haloketone followed by cyclization. Thus, 2,2-dimethyl-1,2,3,4-tetrahydroquinoline was treated by BrCH2COC6H4F-4 in DMF and then cyclized by ZnO2 in EtOH to give I (R1 = R2 = Me, R3 = 4-FC6H4, R4 = YZ = H, X = CH2).

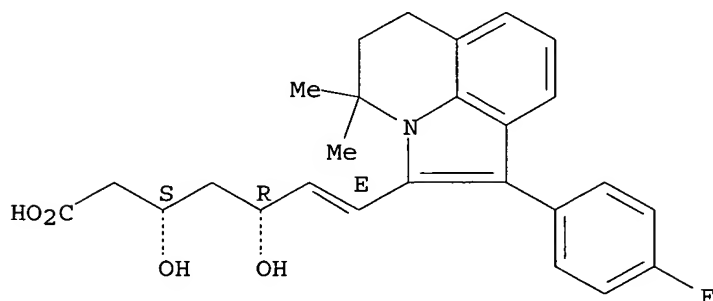
IT 134397-45-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of)

RN 134397-45-8 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



● Na

IT 134397-10-7P 134397-11-8P 134397-12-9P  
134397-13-0P 134397-14-1P 134397-15-2P  
134397-16-3P 134397-18-5P 134397-19-6P  
134397-20-9P 134397-21-0P 134397-22-1P  
134397-23-2P 134397-24-3P 134397-25-4P  
134397-26-5P 134397-27-6P 134397-28-7P  
134397-29-8P 134397-30-1P 134397-31-2P  
134397-32-3P 134397-33-4P 134397-34-5P  
134397-35-6P 134397-36-7P 134397-37-8P



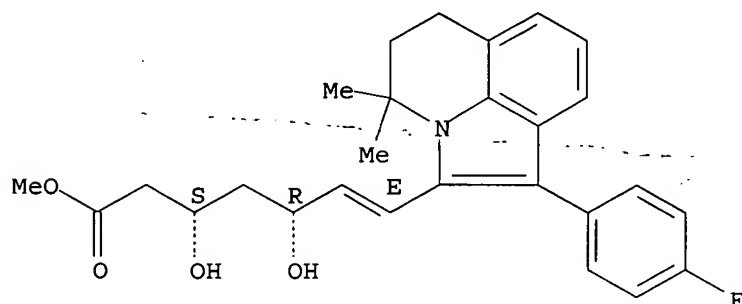
134397-38-9P 134397-39-0P 134397-40-3P  
 134397-41-4P 134397-42-5P 134397-43-6P  
 134424-43-4P 134424-44-5P 134424-45-6P  
 134774-67-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and hydrolysis of)

RN 134397-10-7 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-  
 pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-  
 (9CI) (CA INDEX NAME)

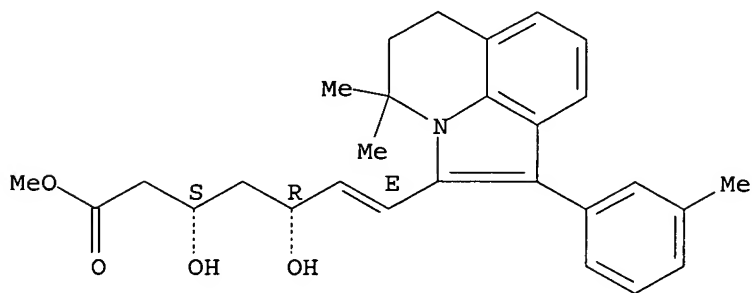
Relative stereochemistry.  
 Double bond geometry as shown.



RN 134397-11-8 CAPLUS

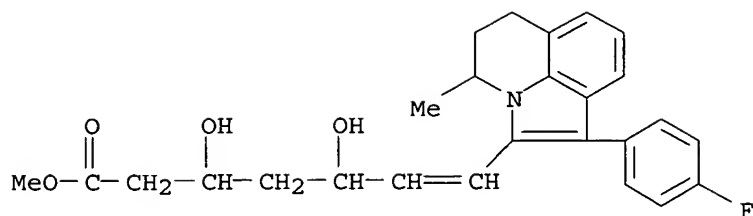
CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(3-methylphenyl)-4H-  
 pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-  
 (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



RN 134397-12-9 CAPLUS

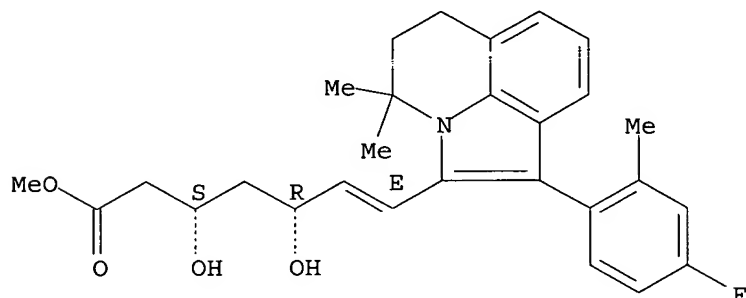
CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4-methyl-4H-  
 pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester (9CI) (CA  
 INDEX NAME)



RN 134397-13-0 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

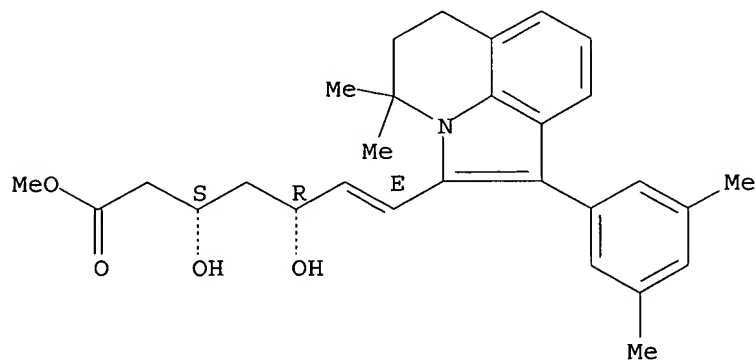
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-14-1 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,5-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

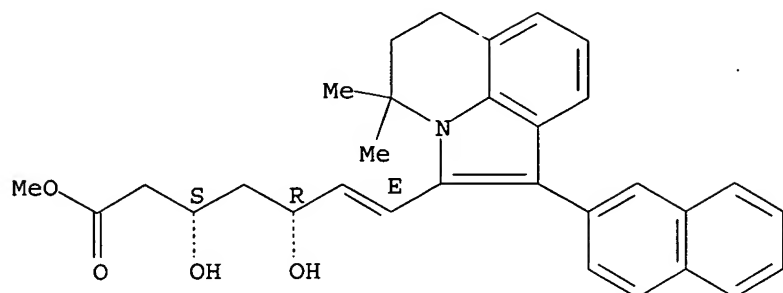
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-15-2 CAPLUS

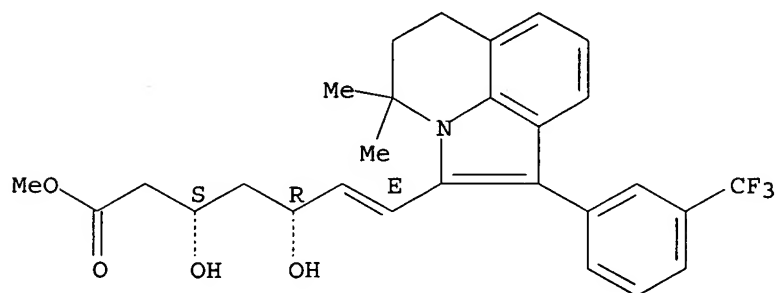
CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(2-naphthalenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



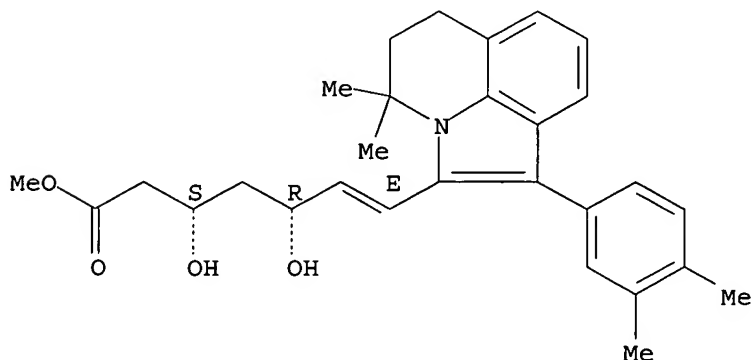
RN 134397-16-3 CAPLUS  
CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-[3-(trifluoromethyl)phenyl]-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-18-5 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(3,4-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

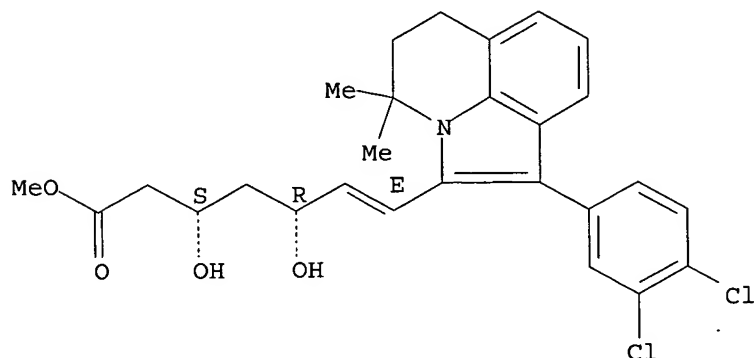


RN 134397-19-6 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,4-dichlorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

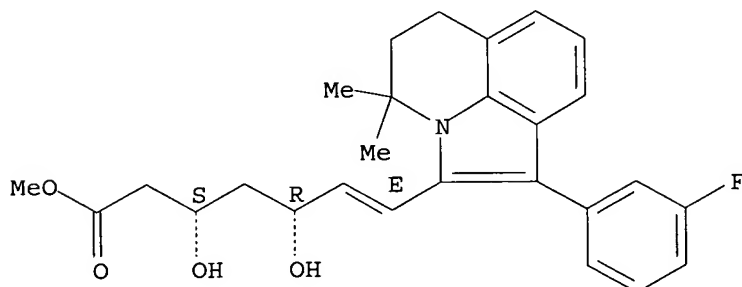


RN 134397-20-9 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

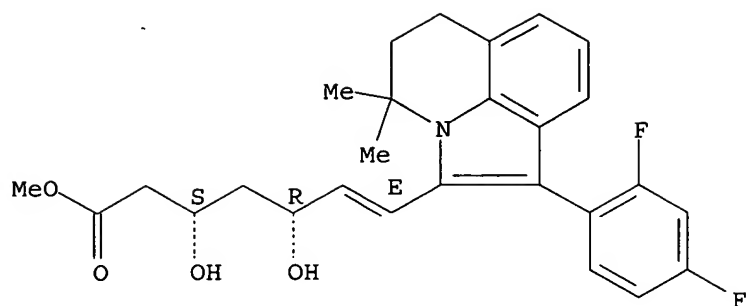


RN 134397-21-0 CAPLUS

CN 6-Heptenoic acid, 7-[1-(2,4-difluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

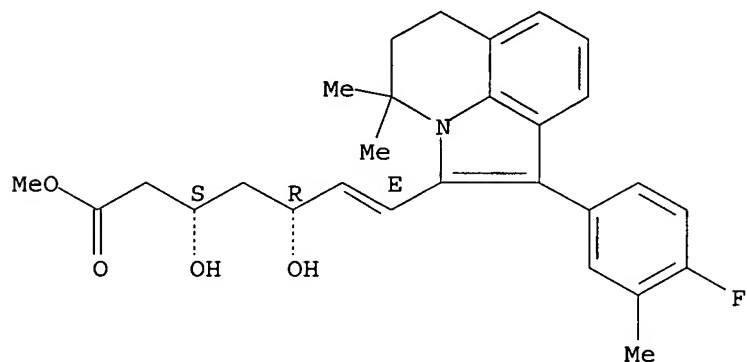
Double bond geometry as shown.



RN 134397-22-1 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluoro-3-methylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester (9CI) (CA INDEX NAME)

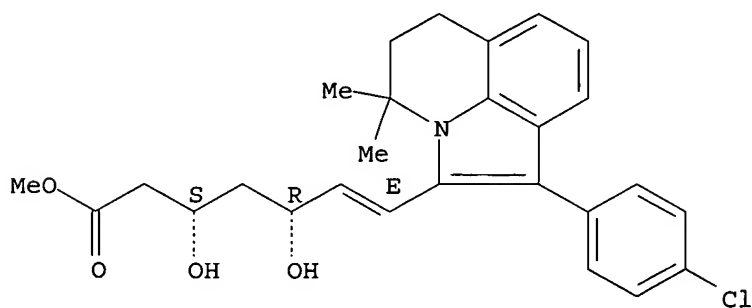
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-23-2 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-chlorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

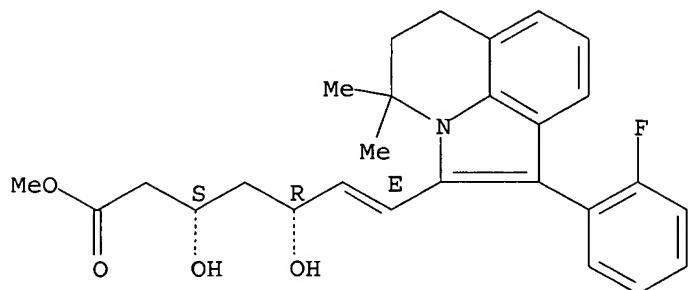


RN 134397-24-3 CAPLUS

CN 6-Heptenoic acid, 7-[1-(2-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-

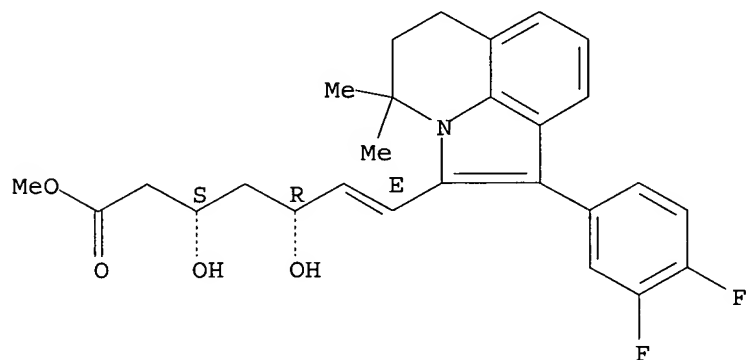
pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



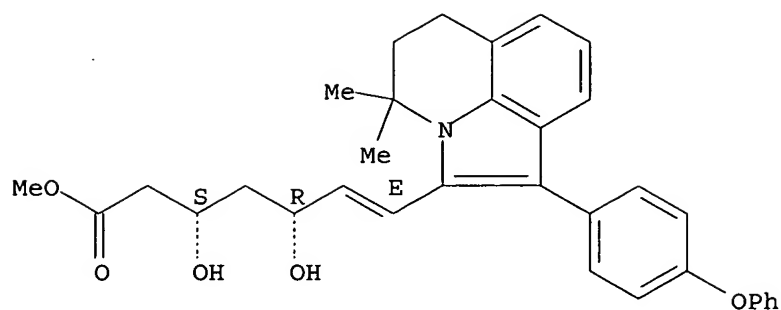
RN 134397-25-4 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(3,4-difluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-26-5 CAPLUS  
CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(4-phenoxyphenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

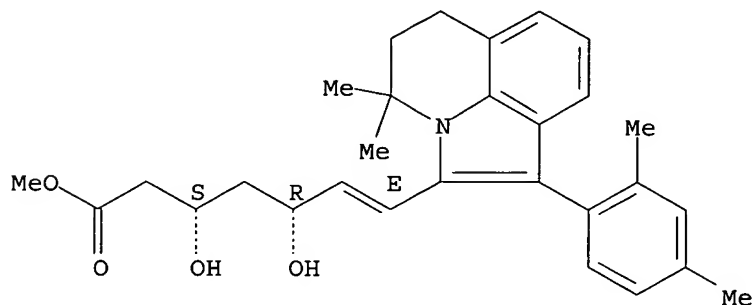
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-27-6 CAPLUS

CN 6-Heptenoic acid, 7-[1-(2,4-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

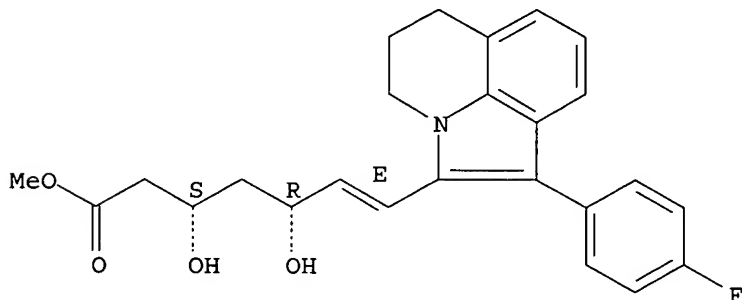
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-28-7 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

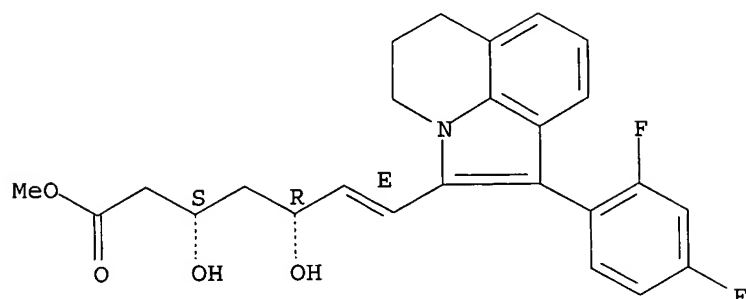
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-29-8 CAPLUS

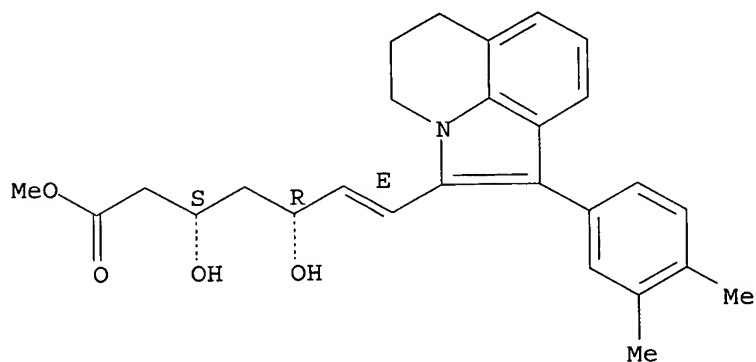
CN 6-Heptenoic acid, 7-[1-(2,4-difluorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-30-1 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(3,4-dimethylphenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

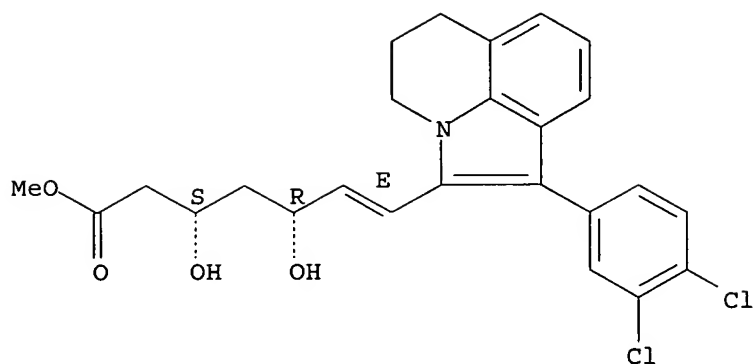
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-31-2 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(3,4-dichlorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

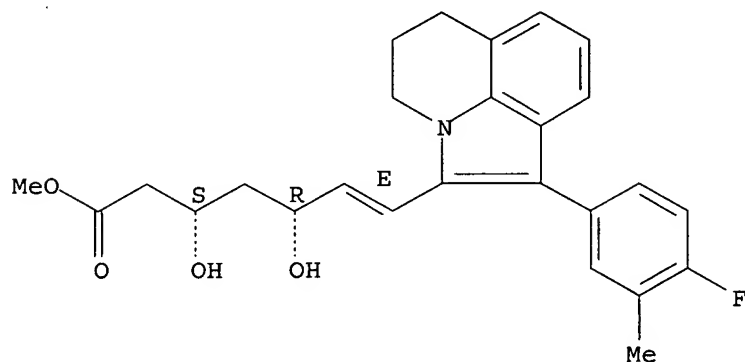
Relative stereochemistry.  
Double bond geometry as shown.





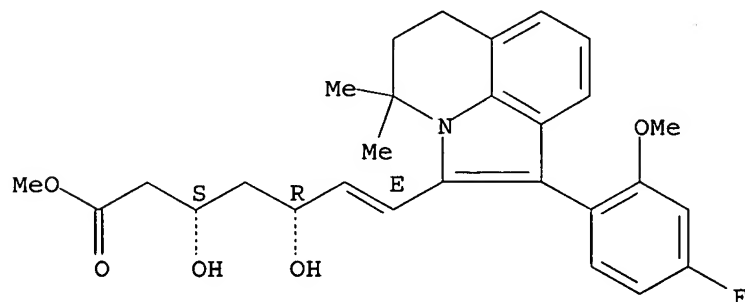
RN 134397-32-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-3-methylphenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



RN 134397-33-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

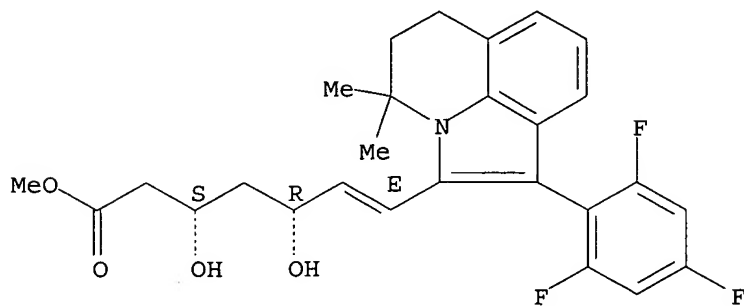
Relative stereochemistry.  
 Double bond geometry as shown.



RN 134397-34-5 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(2,4,6-trifluorophenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

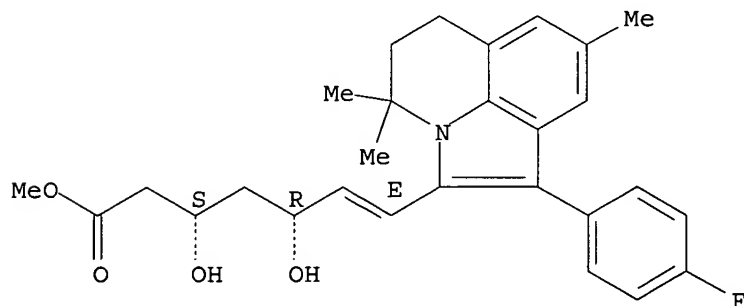
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-35-6 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4,8-trimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

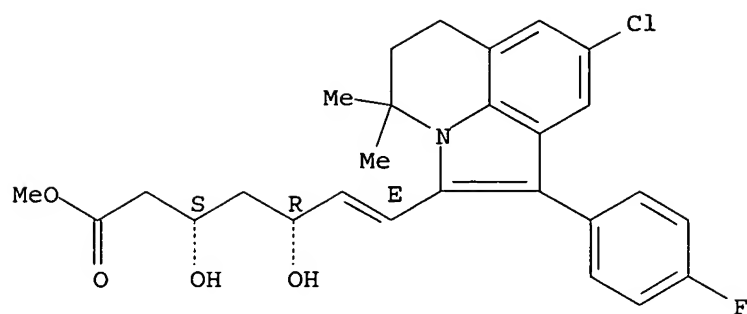
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-36-7 CAPLUS

CN 6-Heptenoic acid, 7-[8-chloro-1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

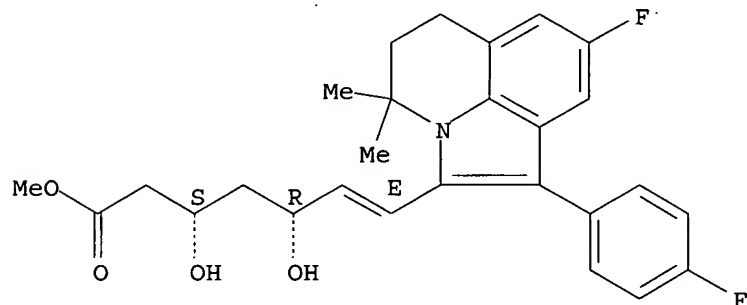


RN 134397-37-8 CAPLUS

CN 6-Heptenoic acid, 7-[8-fluoro-1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

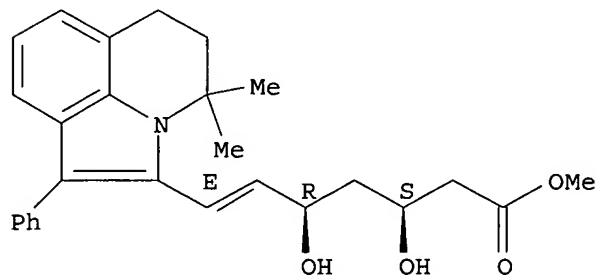


RN 134397-38-9 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-phenyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

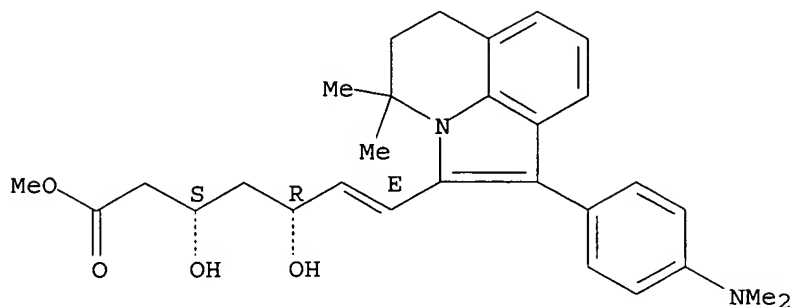
Double bond geometry as shown.



RN 134397-39-0 CAPLUS

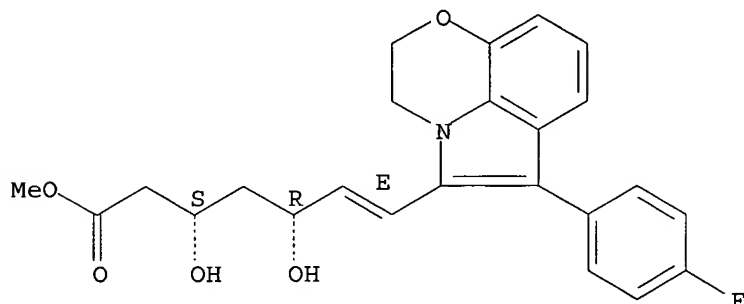
CN 6-Heptenoic acid, 7-[1-[4-(dimethylamino)phenyl]-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



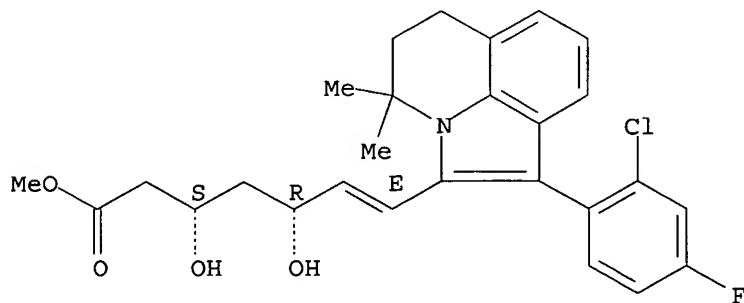
RN 134397-40-3 CAPLUS  
CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydropyrrolo[1,2,3-de]-1,4-benzoxazin-5-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-41-4 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(2-chloro-4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

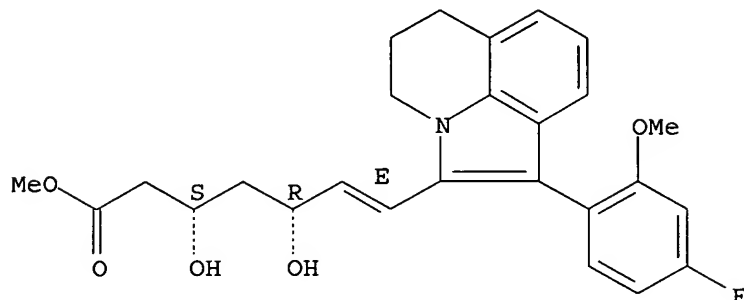
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-42-5 CAPLUS  
CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4H-

pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-  
(9CI) (CA INDEX NAME)

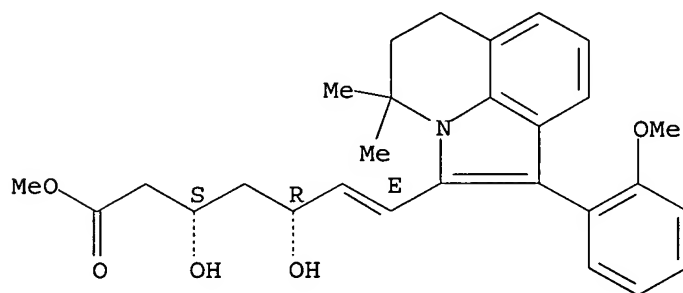
Relative stereochemistry.  
Double bond geometry as shown.



RN 134397-43-6 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-1-(2-methoxyphenyl)-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-  
(9CI) (CA INDEX NAME)

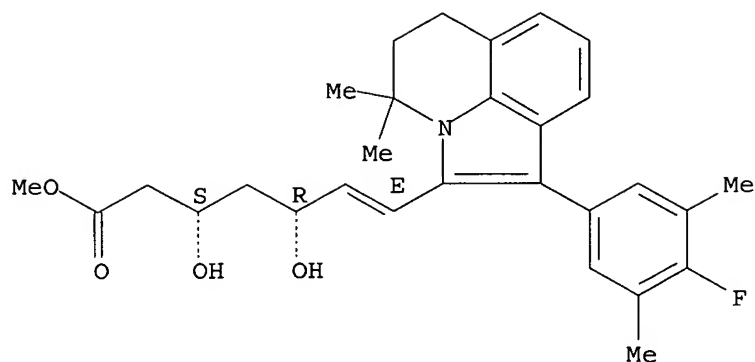
Relative stereochemistry.  
Double bond geometry as shown.



RN 134424-43-4 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluoro-3,5-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

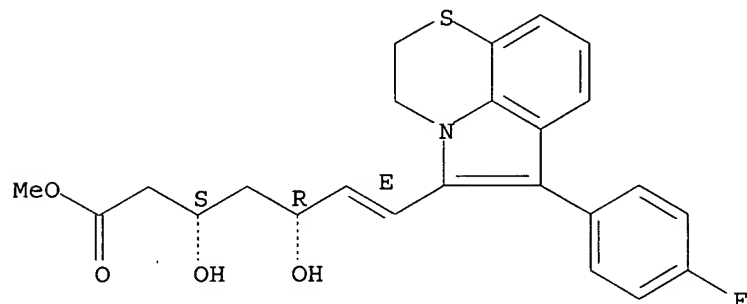
Relative stereochemistry.  
Double bond geometry as shown.



RN 134424-44-5 CAPLUS

CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydropyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

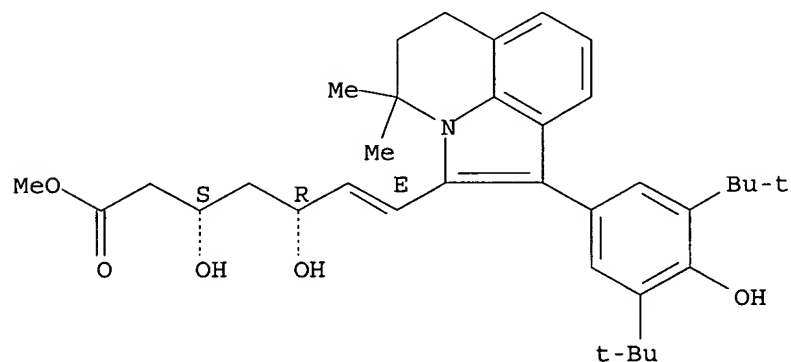
Relative stereochemistry.  
Double bond geometry as shown.



RN 134424-45-6 CAPLUS

CN 6-Heptenoic acid, 7-[1-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

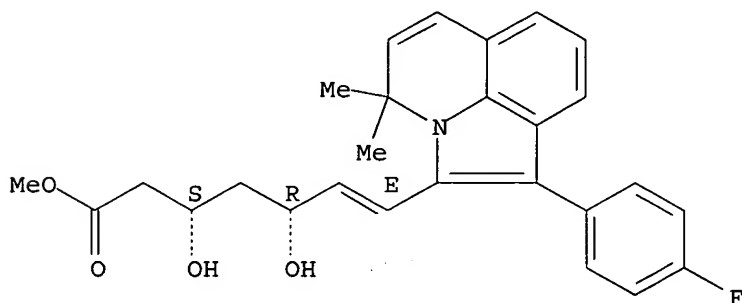


RN 134774-67-7 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 134397-46-9P 134397-47-0P 134397-48-1P  
 134397-49-2P 134397-50-5P 134397-51-6P  
 134397-52-7P 134397-54-9P 134397-55-0P  
 134397-56-1P 134397-57-2P 134397-58-3P  
 134397-59-4P 134397-60-7P 134397-61-8P  
 134397-62-9P 134397-63-0P 134397-64-1P  
 134397-65-2P 134397-66-3P 134397-67-4P  
 134397-68-5P 134397-69-6P 134397-70-9P  
 134397-71-0P 134397-72-1P 134397-73-2P  
 134397-74-3P 134397-75-4P 134397-76-5P  
 134397-77-6P 134397-78-7P 134397-79-8P  
 134397-80-1P 134397-81-2P 134397-88-9P  
 134397-89-0P 134397-92-5P 134397-93-6P  
 134397-97-0P 134424-46-7P 134424-47-8P  
 134774-68-8P

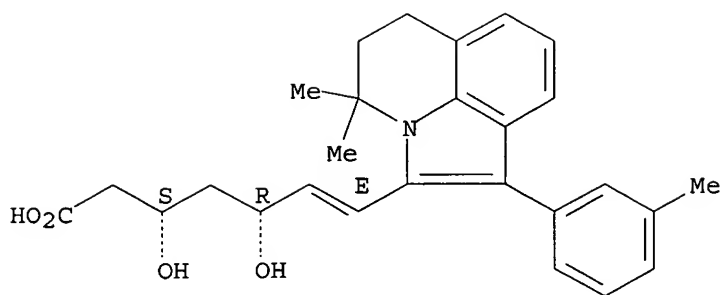
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 134397-46-9 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(3-methylphenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

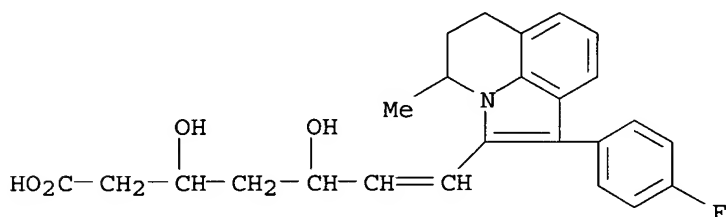
Relative stereochemistry.

Double bond geometry as shown.



● Na

RN 134397-47-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4-methyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt (9CI) (CA INDEX NAME)

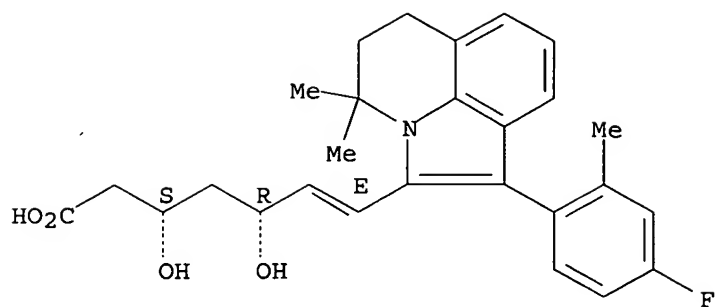


● Na

RN 134397-48-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



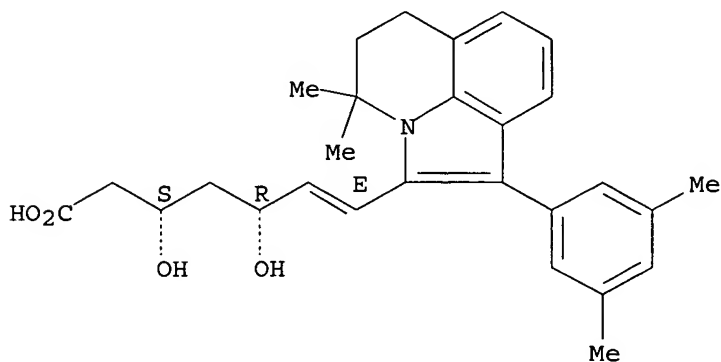


● Na

RN 134397-49-2 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,5-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

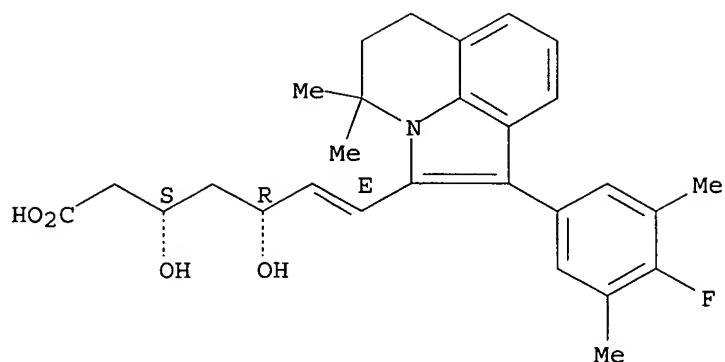


● Na

RN 134397-50-5 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluoro-3,5-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

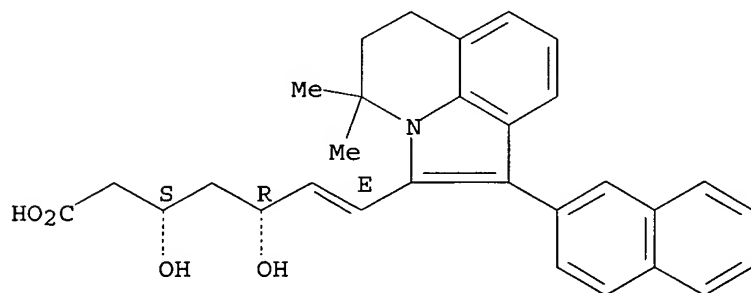


● Na

RN 134397-51-6 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(2-naphthalenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

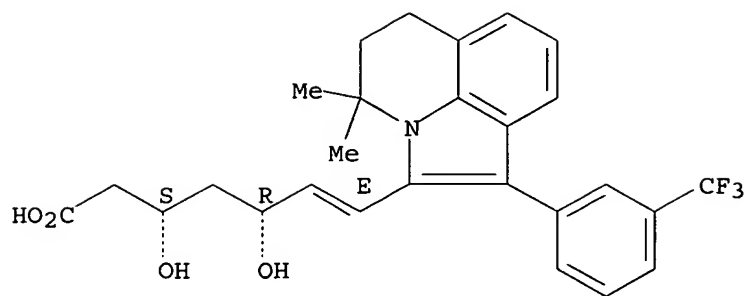


● Na

RN 134397-52-7 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-[3-(trifluoromethyl)phenyl]-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



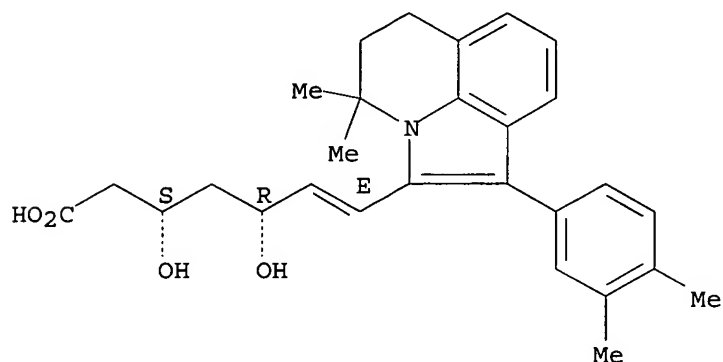
● Na

RN 134397-54-9 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,4-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



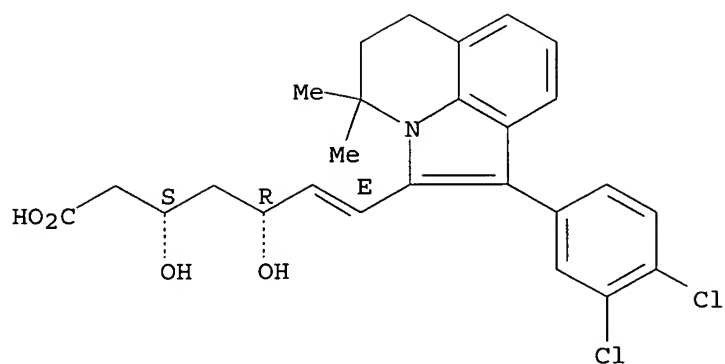
● Na

RN 134397-55-0 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,4-dichlorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

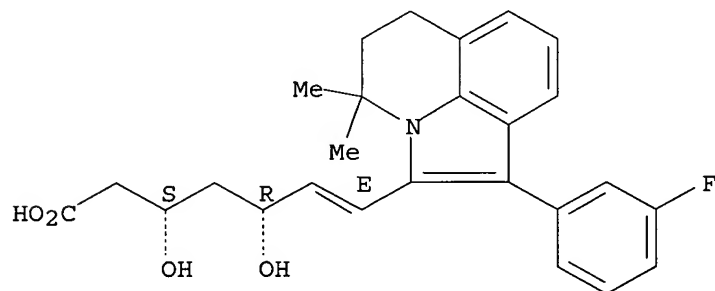
Double bond geometry as shown.



● Na

RN 134397-56-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(3-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

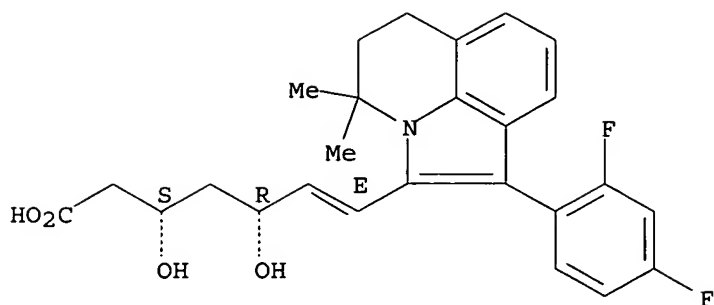
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-57-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(2,4-difluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

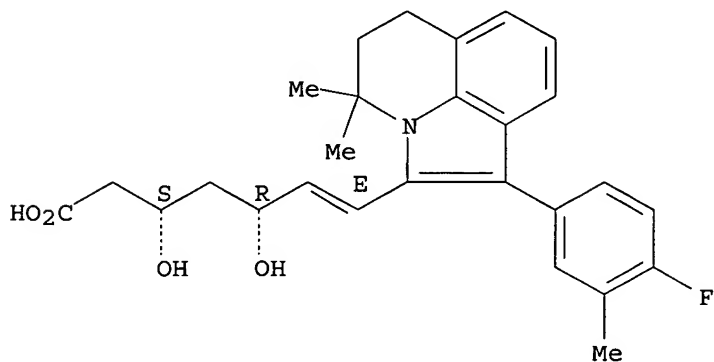
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-58-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-3-methylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

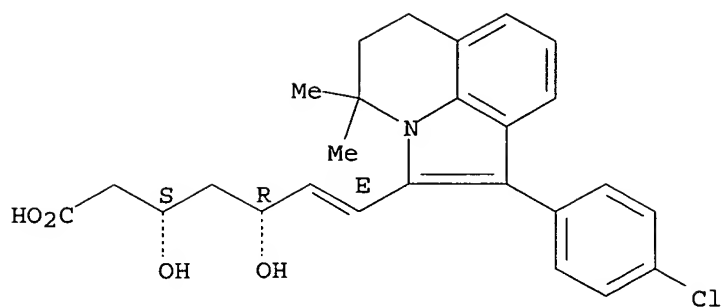
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-59-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-chlorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



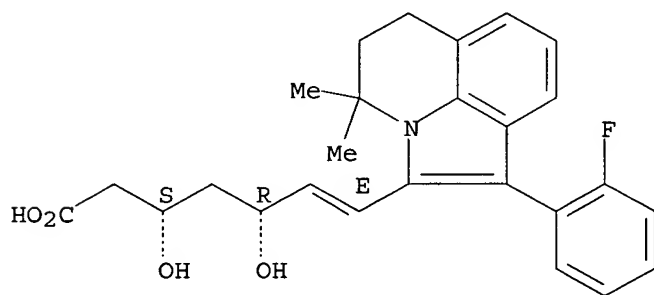
● Na

RN 134397-60-7 CAPLUS

CN 6-Heptenoic acid, 7-[1-(2-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



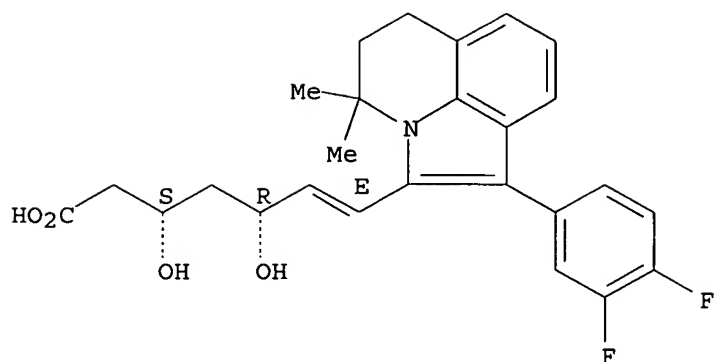
● Na

RN 134397-61-8 CAPLUS

CN 6-Heptenoic acid, 7-[1-(3,4-difluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

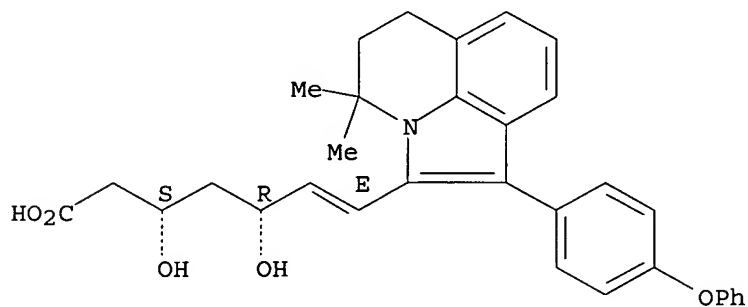
Double bond geometry as shown.



● Na

RN 134397-62-9 CAPLUS  
 CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(4-phenoxyphenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

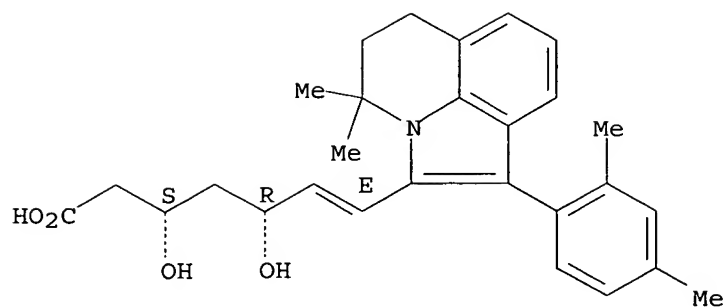
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-63-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(2,4-dimethylphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

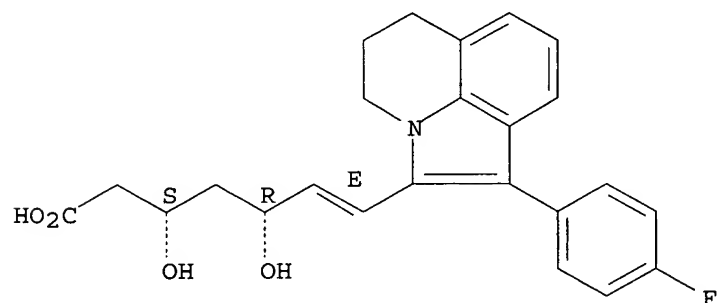
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-64-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

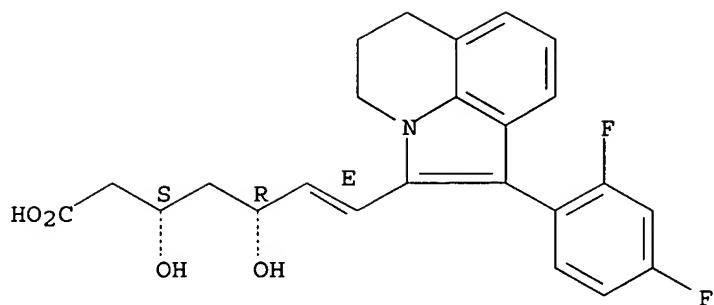


● Na

RN 134397-65-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(2,4-difluorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

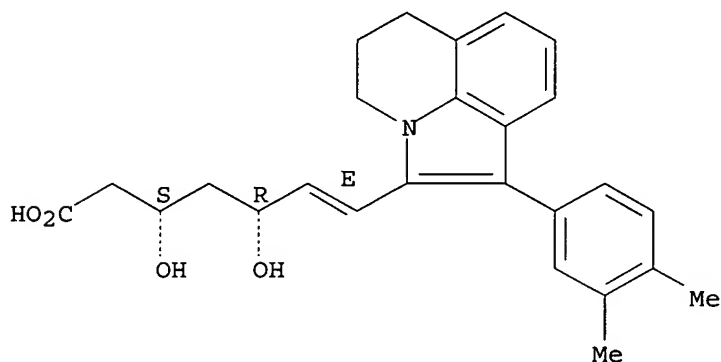




● Na

RN 134397-66-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(3,4-dimethylphenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

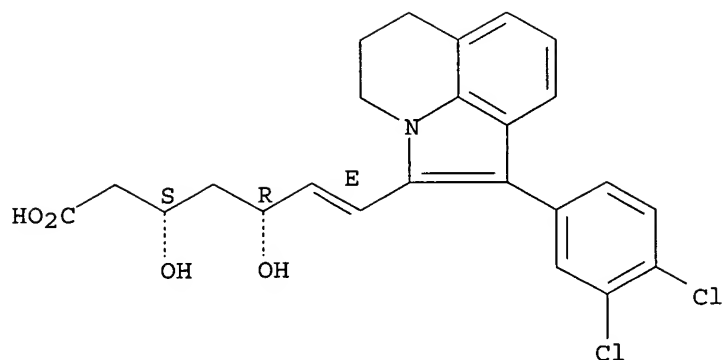
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-67-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(3,4-dichlorophenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

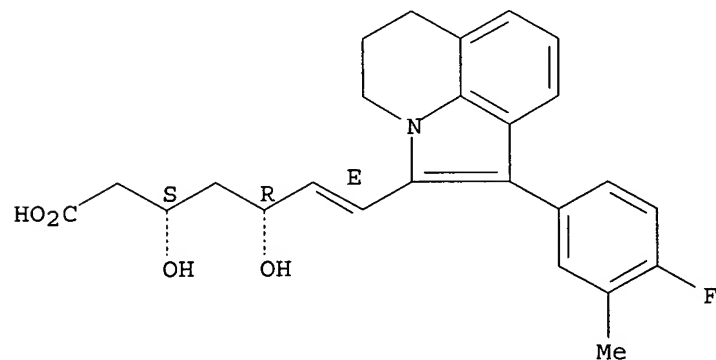
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-68-5 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-3-methylphenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

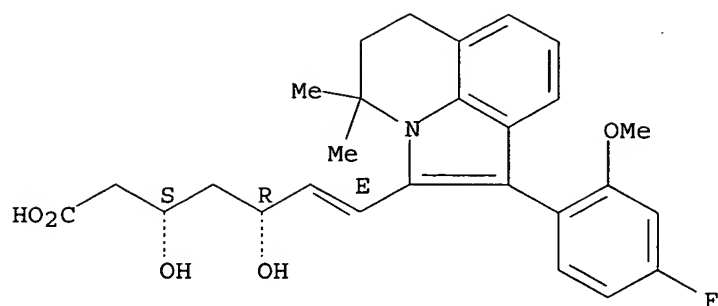
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-69-6 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



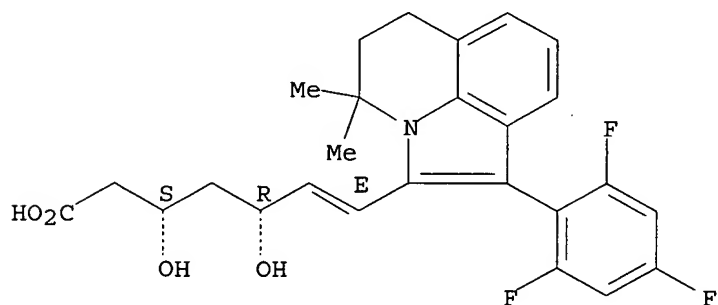
● Na

RN 134397-70-9 CAPLUS

CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-(2,4,6-trifluorophenyl)-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



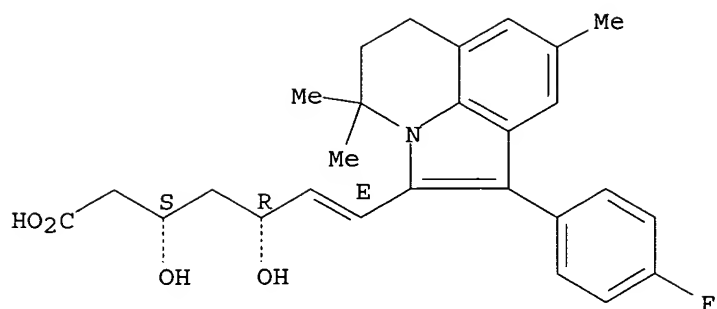
● Na

RN 134397-71-0 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4,8-trimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

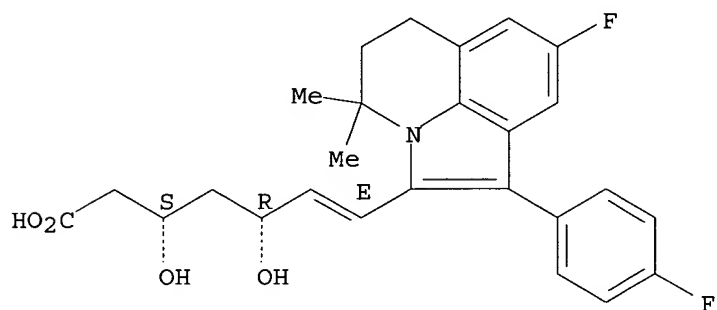
Double bond geometry as shown.



● Na

RN 134397-72-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[8-fluoro-1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

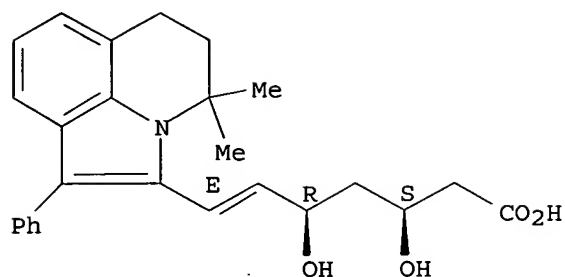
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-73-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[5,6-dihydro-4,4-dimethyl-1-phenyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

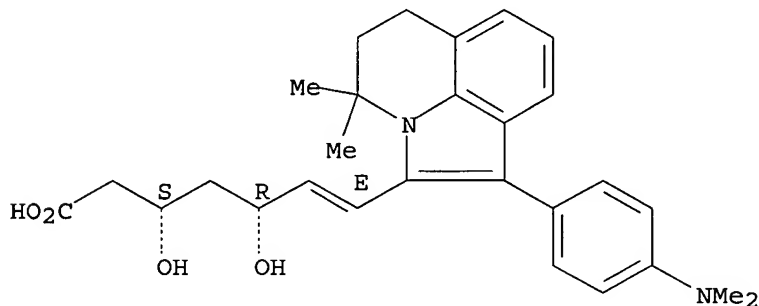


● Na

RN 134397-74-3 CAPLUS

CN 6-Heptenoic acid, 7-[1-[4-(dimethylamino)phenyl]-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

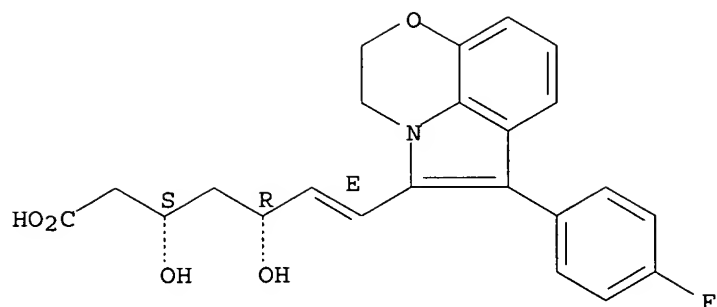


● Na

RN 134397-75-4 CAPLUS

CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydropyrrolo[1,2,3-de]-1,4-benzoxazin-5-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

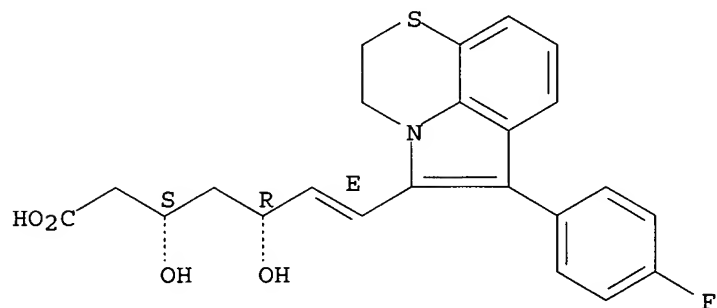
Relative stereochemistry.  
Double bond geometry as shown.



● Na

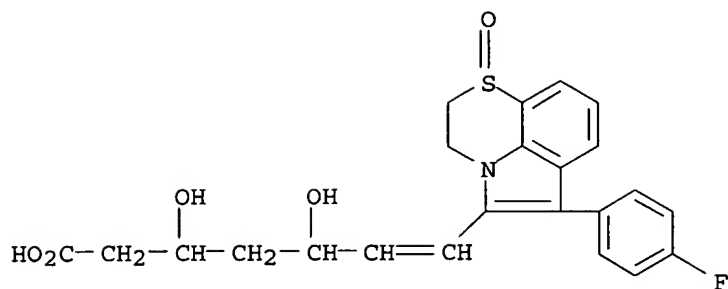
RN 134397-76-5 CAPLUS  
 CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydropyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI)  
 (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



● Na

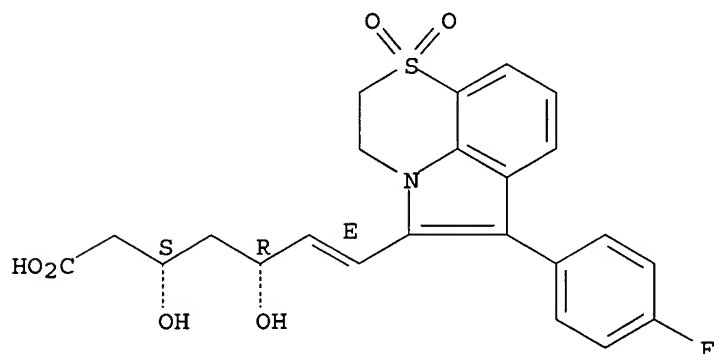
RN 134397-77-6 CAPLUS  
 CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydro-1-oxidopyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, monosodium salt, (3R\*,5S\*,6E)- (9CI)  
 (CA INDEX NAME)



● Na

RN 134397-78-7 CAPLUS  
 CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydro-1,1-dioxidopyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

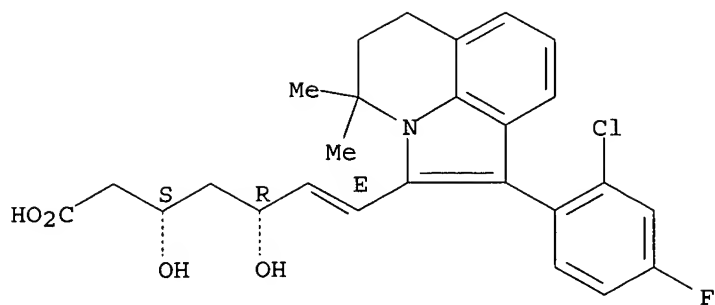
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-79-8 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(2-chloro-4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

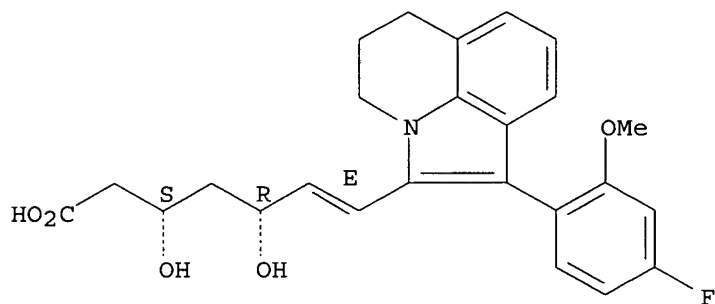
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 134397-80-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

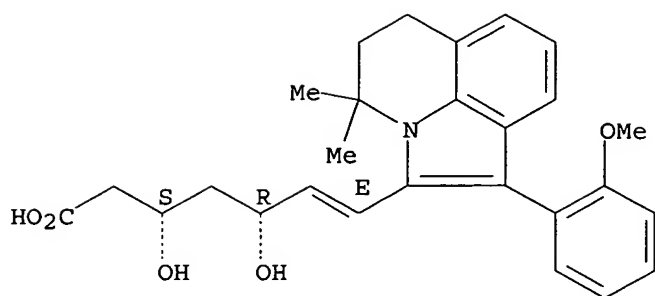


● Na

RN 134397-81-2 CAPLUS  
 CN 6-Heptenoic acid, 7-[5,6-dihydro-1-(2-methoxyphenyl)-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

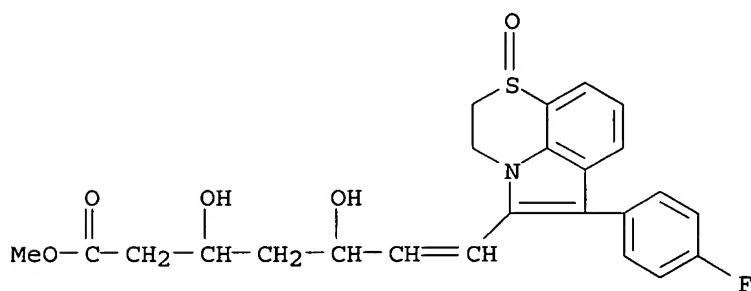
Relative stereochemistry.  
 Double bond geometry as shown.





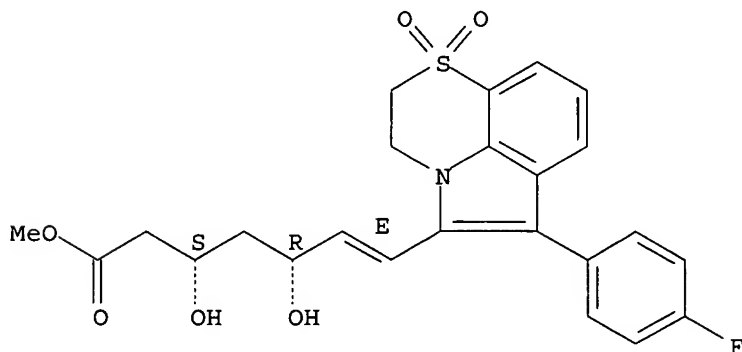
● Na

RN 134397-88-9 CAPLUS  
 CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydro-1-oxidopyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, methyl ester, (3R\*,5S\*,6E)-(9CI) (CA INDEX NAME)



RN 134397-89-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[6-(4-fluorophenyl)-2,3-dihydro-1,1-dioxidopyrrolo[1,2,3-de]-1,4-benzothiazin-5-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]-(9CI) (CA INDEX NAME)

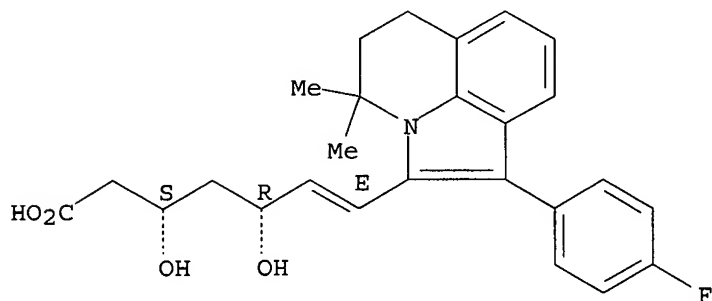
Relative stereochemistry.  
 Double bond geometry as shown.



RN 134397-92-5 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]-(-) - (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.  
Double bond geometry as shown.

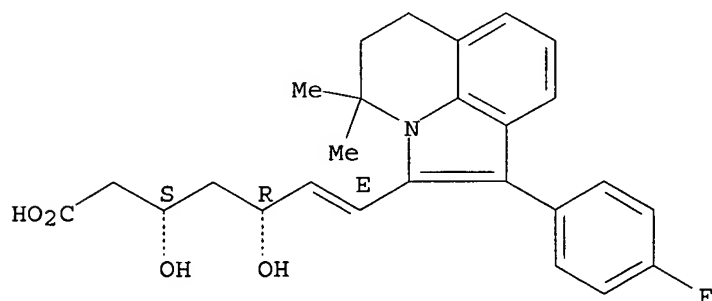


● Na

RN 134397-93-6 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]-(+) - (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.  
Double bond geometry as shown.

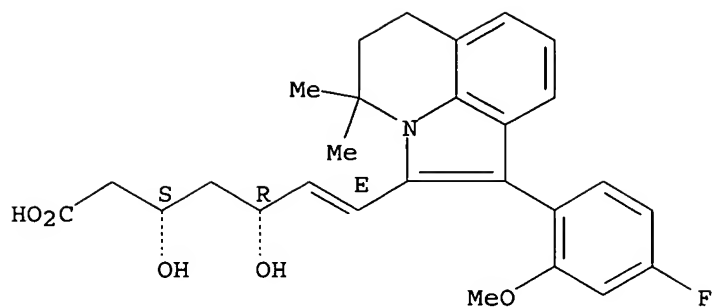


● Na

RN 134397-97-0 CAPLUS

CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]-(-) - (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.  
Double bond geometry as shown.



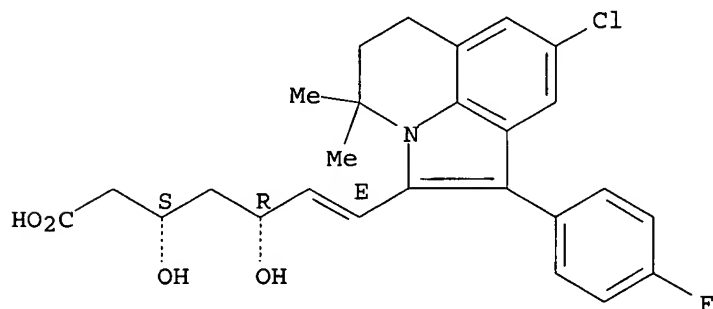
● Na

RN 134424-46-7 CAPLUS

CN 6-Heptenoic acid, 7-[8-chloro-1-(4-fluorophenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



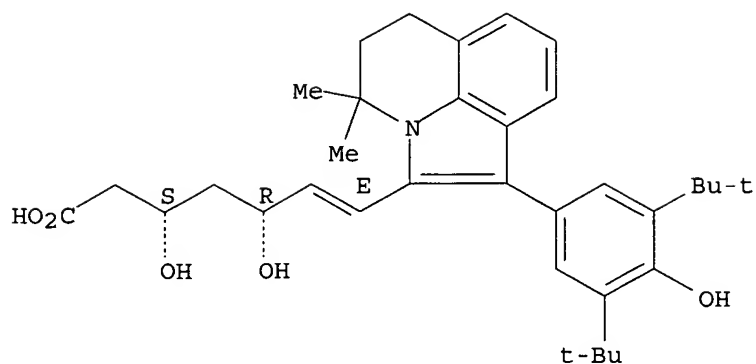
● Na

RN 134424-47-8 CAPLUS

CN 6-Heptenoic acid, 7-[1-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

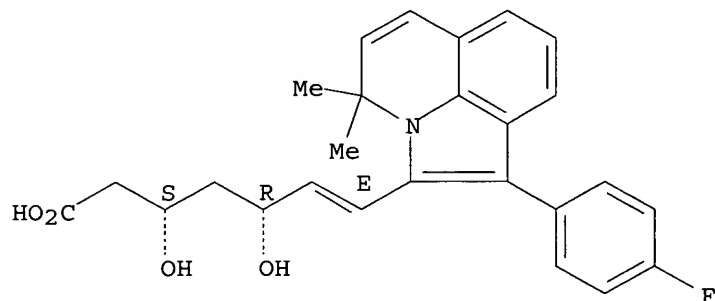
Double bond geometry as shown.



● Na

RN 134774-68-8 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluorophenyl)-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

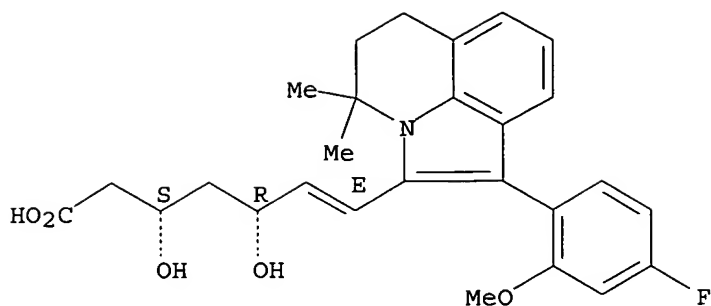
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

IT 134397-98-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as hydroxymethylglutaryl-CoA reductase inhibitor)  
 RN 134397-98-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-(4-fluoro-2-methoxyphenyl)-5,6-dihydro-4,4-dimethyl-4H-pyrrolo[3,2,1-ij]quinolin-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (+) - (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.  
 Double bond geometry as shown.



● Na

L24 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:531998 CAPLUS

DOCUMENT NUMBER: 113:131998

TITLE: Stereoselective preparation of erythro-E-3,5-dihydroxy-7-[3'-(4''-fluorophenyl)-1'-(1''-methylethyl)indol-2'yl]heptenoates

INVENTOR(S): Chen, Kau Ming; Kapa, Prasad Koteswara; Lee, George T.; Repic, Oljan; Hess, Petr; Crevoisier, Michel

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.; Sandoz-Patent-G.m.b.H.; Sandoz-Erfindungen-Verwaltungsgesellschaft m.b.H.

SOURCE: Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

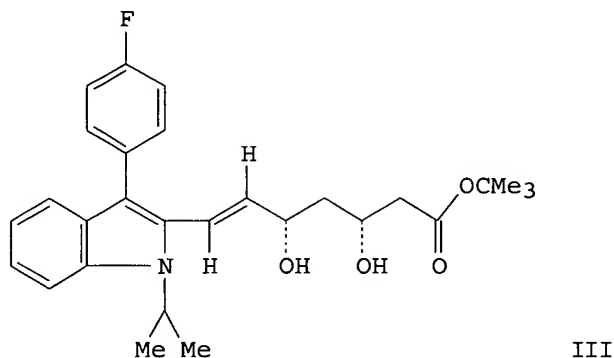
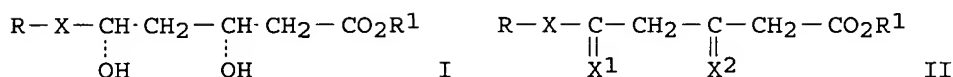
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 363934	A1	19900418	EP 1989-118906	19891011
EP 363934	B1	19931229		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
WO 9003962	A1	19900419	WO 1989-EP1201	19891011
W: AU, BG, DK, FI, HU, JP, KR, NO, RO, SU				
AU 8943448	A1	19900501	AU 1989-43448	19891011
AU 636122	B2	19930422		
HU 53860	A2	19901228	HU 1989-6048	19891011
HU 207993	B	19930728		
JP 03501735	T2	19910418	JP 1989-510605	19891011
JP 2853227	B2	19990203		
EP 562643	A2	19930929	EP 1993-106005	19891011
EP 562643	A3	19940518		
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AT 99281	E	19940115	AT 1989-118906	19891011
IL 91941	A1	19941021	IL 1989-91941	19891011
ES 2060712	T3	19941201	ES 1989-118906	19891011
RO 109732	B1	19950530	RO 1989-145326	19891011
RU 2051907	C1	19960110	RU 1989-4830164	19891011
CA 2000553	AA	19900413	CA 1989-2000553	19891012
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DD 296908	A5	19911219	DD 1989-333538	19891012

CZ 283316	B6	19980218	CZ 1989-5797	19891012
SK 280845	B6	20000814	SK 1989-5797	19891012
ZA 8907782	A	19910925	ZA 1989-7782	19891013
US 5189164	A	19930223	US 1990-482433	19900220
NO 9002598	A	19900807	NO 1990-2598	19900612
NO 174623	B	19940228		
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DK 9001446	A	19900613	DK 1990-1446	19900613
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PRIORITY APPLN. INFO.:			US 1988-257475	A 19881013
			US 1989-355531	A 19890522
			EP 1989-118906	A 19891011
			WO 1989-EP1201	A 19891011

OTHER SOURCE(S): MARPAT 113:131998  
GI



AB The title compds. (I; R = organic group inert to reducing conditions; R<sup>1</sup> = ester group inert to the reaction conditions; X = CH<sub>2</sub>CH<sub>2</sub>, CH:CH) were prepared by stereoselective reduction of II (one of X<sup>1</sup>,X<sup>2</sup> = O, the other = H, OH) using R<sub>4</sub>OB<sub>2</sub>R<sub>3</sub> (R<sub>3</sub> = primary or secondary C<sub>2</sub>-4 alkyl, R<sub>4</sub> = allyl, C<sub>1</sub>-4 alkyl) and NaBH<sub>4</sub> in a mixed alc./THF solvent followed by cleavage of the intermediate cyclic boronate. Thus, (±)-E-1-[3'-(4''-fluorophenyl)-1'-(1''-methylethyl)indol-2'-yl]-5-hydroxy-3-oxohept-6-enoic acid tert-Bu ester in THF/MeOH at -74 to -77° was added dropwise to a mixture of NaBH<sub>4</sub> and MeOB<sub>2</sub>t<sub>2</sub> in THF/MeOH. The mixture was stirred 30 min to give a cyclic boronate which in EtOAc was treated with 30% H<sub>2</sub>O<sub>2</sub> to give racemic diol III (99.67% erythro).

IT **93957-55-2P**

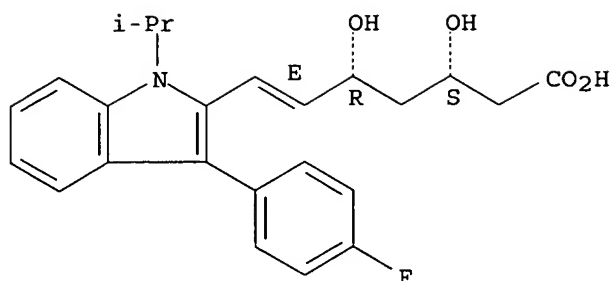
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



● Na

IT 93957-53-0P

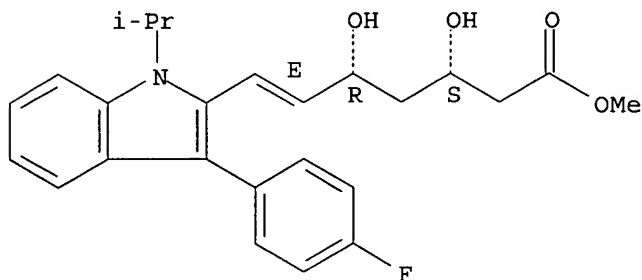
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, via stereoselective reduction of hydroxyketo ester)

RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 129332-29-2

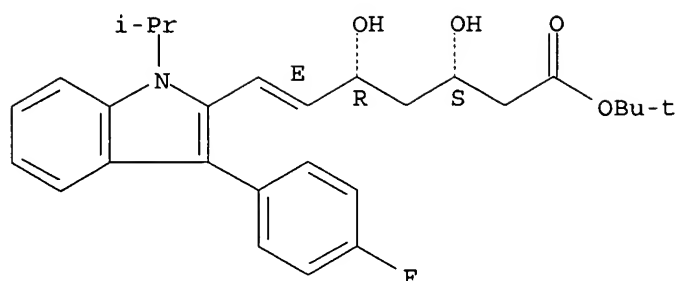
RL: RCT (Reactant); RACT (Reactant or reagent)  
(stereoselective preparation and hydrolysis of)

RN 129332-29-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 1,1-dimethylethyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



L24 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:460752 CAPLUS

DOCUMENT NUMBER: 105:60752

TITLE: Silylated dihydroxyoxohexanoate intermediates for 6-substituted-4-hydroxytetrahydropyran-2-ones

INVENTOR(S): Kapa, Prasad K.

PATENT ASSIGNEE(S): Sandoz, Inc., USA

SOURCE: U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

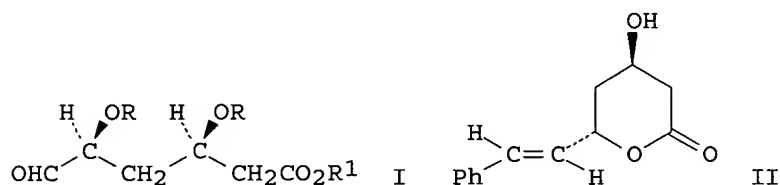
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4571428	A	19860218	US 1983-512163	19830708
US 4841071	A	19890620	US 1985-771809	19850903
PRIORITY APPLN. INFO.:			US 1983-512163	A3 19830708
OTHER SOURCE(S):	CASREACT	105:60752		

GI



AB The title intermediates (I; R = OH-protective group; R1 = C1-4 alkyl, PhCH2), precursors for antiatherosclerotic (no data) hydroxytetrahydropyranones (e.g., II), were prepared. Thus, hydrogenation of phloroglucinol over Raney Ni gave cis-1,3,5-trihydroxycyclohexane, which was diprotected with Me3CSiPh2Cl and oxidized with pyridinium chlorochromate (III) to give the corresponding silylated dihydroxycyclohexanone. The latter underwent Baeyer-Villiger oxidation, followed by methanolysis and reoxidn. with III, to give I (R = SiPh2CMe3, R1 = Me) (IV). Wittig reaction of IV with PhCH2P+Ph3 Cl-, followed by deprotection and lactonization, gave II. IV was utilized as an intermediate for other antiatherosclerotics via Wittig reaction with appropriate phosphonium salts.

IT 103338-14-3P

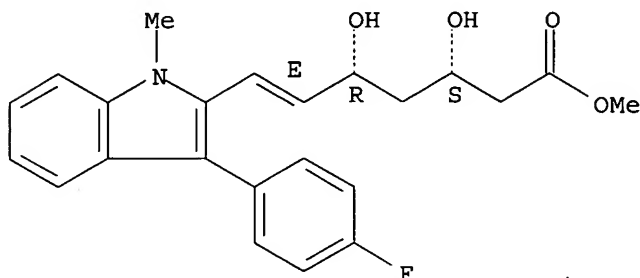


RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydrolysis of)

RN 103338-14-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-  
dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



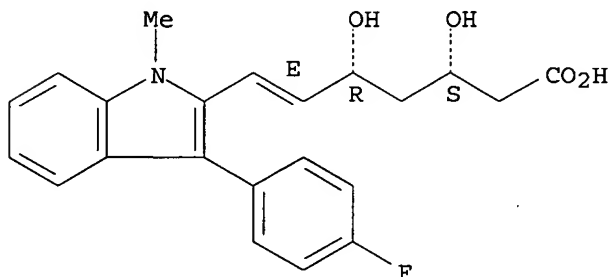
IT 103338-13-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as antiatherosclerotic)

RN 103338-13-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-  
dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



● Na

L24 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:24475 CAPLUS

DOCUMENT NUMBER: 102:24475

TITLE: Analogs of mevalolactone and derivatives thereof and  
their use as pharmaceuticals

INVENTOR(S): Kathawala, Faizulla Gulamhusein

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

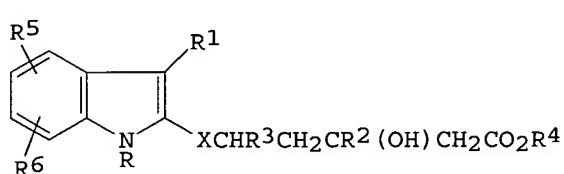
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

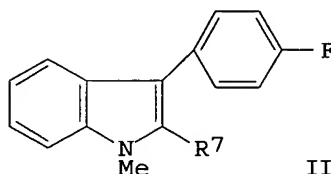
## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8402131	A1	19840607	WO 1983-EP308	19831118
W: AU, DK, FI, HU, JP				
AU 8322612	A1	19840618	AU 1983-22612	19831118
AU 570021	B2	19880303		
JP 60500015	T2	19850110	JP 1983-503754	19831118
JP 02046031	B4	19901012		
HU 35642	O	19850729	HU 1984-284	19831118
HU 204253	B	19911230		
ES 527428	A1	19850801	ES 1983-527428	19831121
IL 70286	A1	19870831	IL 1983-70286	19831121
EP 114027	A1	19840725	EP 1983-810548	19831122
EP 114027	B1	19880107		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
ZA 8308718	A	19850828	ZA 1983-8718	19831122
CA 1210405	A1	19860826	CA 1983-441684	19831122
AT 31718	E	19880115	AT 1983-810548	19831122
FI 8402615	A	19840628	FI 1984-2615	19840628
FI 77228	B	19881031		
FI 77228	C	19890210		
DK 8403592	A	19840720	DK 1984-3592	19840720
US 4739073	A	19880419	US 1985-707854	19850304
DK 9000978	A	19900419	DK 1990-978	19900419
DK 165244	B	19921026		
DK 165244	C	19930322		
JP 03047167	A2	19910228	JP 1990-120164	19900511
JP 04040343	B4	19920702		
US 5354772	A	19941011	US 1993-157595	19931124
PRIORITY APPLN. INFO.:				US 1982-443668 A 19821122
				US 1983-548850 A 19831104
				WO 1983-EP308 A 19831118
				EP 1983-810548 A 19831122
				US 1985-707854 A2 19850304
				US 1985-722288 B1 19850411

GI



I



II

AB Antiatherosclerotic (no data) indoles I [R, R<sub>1</sub> = Ph, substituted Ph, alkyl, cycloalkyl, aralkyl; R<sub>2</sub> = H, alkyl; R<sub>3</sub> = OH, R<sub>4</sub> = H; R<sub>3</sub>R<sub>4</sub> = bond; R<sub>5</sub>, R<sub>6</sub> = H, alkyl, cycloalkyl, alkoxy, CF<sub>3</sub>, F, Cl, PhO, PhCH<sub>2</sub>O; X = (CH<sub>2</sub>)<sub>0-3</sub>, CH:CH] were prepared. Thus, II (R<sub>7</sub> = CO<sub>2</sub>Et) was reduced to the alc. and reoxidized to the aldehyde which was treated with Bu<sub>3</sub>SnCH:CHOEt to give II (R<sub>7</sub> = E-CH:CHCHO). The latter compound was treated with MeCOCH<sub>2</sub>CO<sub>2</sub>Me to give II [R<sub>7</sub> = E-CH:CHCH(OH)CH<sub>2</sub>COCH<sub>2</sub>CO<sub>2</sub>Me] was reduced to diol, followed by ester hydrolysis, to give II [R<sub>7</sub> = E-CH:CHCH(OH)CH<sub>2</sub>CH(OH)CH<sub>2</sub>CO<sub>2</sub>H]. Lactonization of this acid gave I [X = E-CH:CH, R = Me; R<sub>2</sub> = R<sub>5</sub> = R<sub>6</sub> = H, R<sub>1</sub> = 4-FC<sub>6</sub>H<sub>4</sub>, R<sub>3</sub>R<sub>4</sub> = bond].

IT 93957-45-0P 93957-53-0P

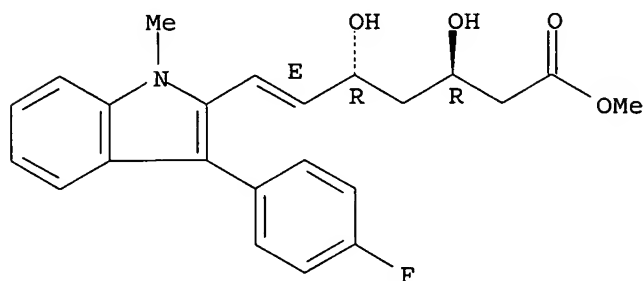
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and ester hydrolysis of)

RN 93957-45-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-  
dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

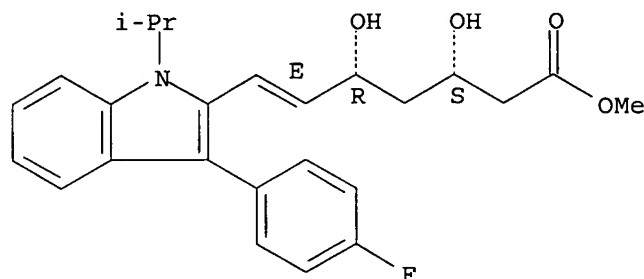


RN 93957-53-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-  
3,5-dihydroxy-, methyl ester, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 93936-57-3P 93936-58-4P 93936-59-5P  
 93936-60-8P 93936-61-9P 93936-62-0P  
 93936-63-1P 93936-64-2P 93936-65-3P  
 93936-66-4P 93936-67-5P 93936-68-6P  
 93936-69-7P 93936-70-0P 93936-71-1P  
 93936-72-2P 93936-73-3P 93936-74-4P  
 93936-75-5P 93936-76-6P 93936-77-7P  
 93936-78-8P 93936-79-9P 93936-80-2P  
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 93936-84-6P 93936-85-7P 93936-86-8P  
 93936-87-9P 93937-46-3P 93937-47-4P  
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 93937-53-2P 93937-54-3P 93937-55-4P  
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 93937-59-8P 93937-60-1P 93937-61-2P  
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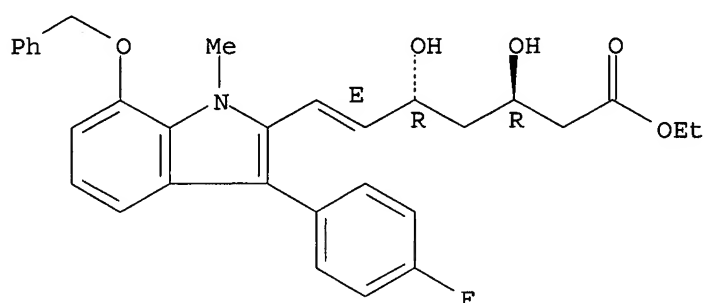
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 93957-75-6P 93957-76-7P 93957-77-8P  
 93957-78-9P 93984-61-3P 94061-80-0P  
 94061-81-1P 103338-13-2P 103338-14-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 93936-57-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-7-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

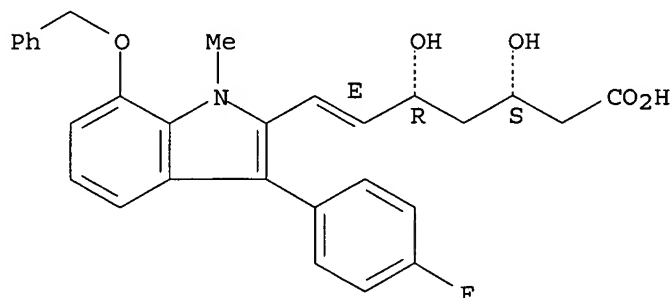
Relative stereochemistry.  
 Double bond geometry as shown.



RN 93936-58-4 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-7-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



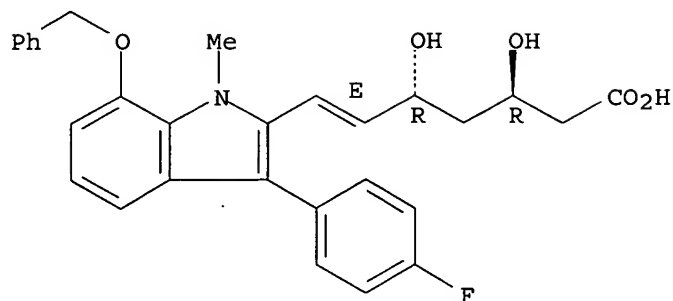
● Na

RN 93936-59-5 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-7-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



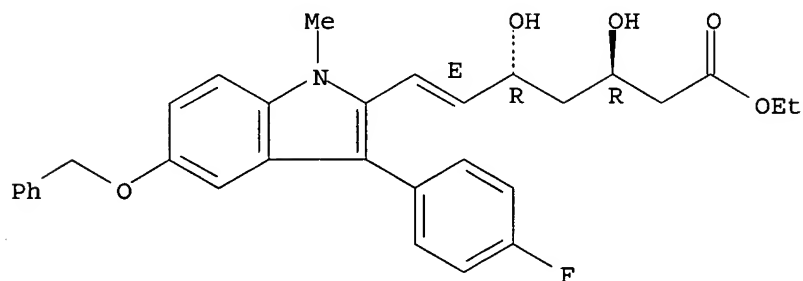
● Na

RN 93936-60-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-5-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

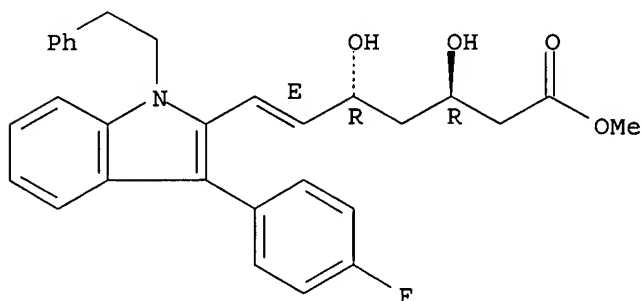


RN 93936-61-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-phenylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

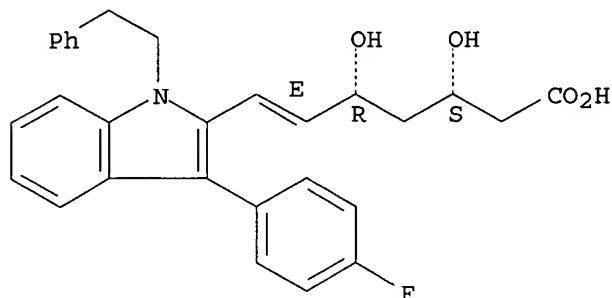
Double bond geometry as shown.



RN 93936-62-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-phenylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

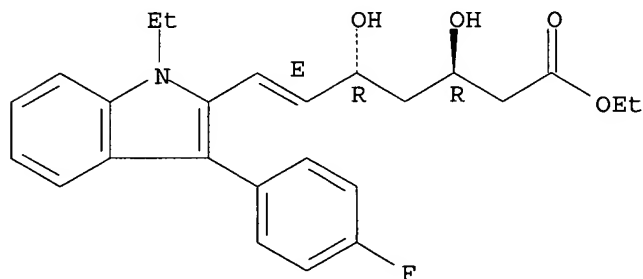


● Na

RN 93936-63-1 CAPLUS

CN 6-Heptenoic acid, 7-[1-ethyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

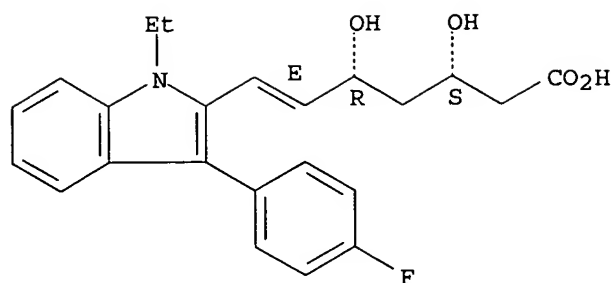
Relative stereochemistry.  
Double bond geometry as shown.



RN 93936-64-2 CAPLUS

CN 6-Heptenoic acid, 7-[1-ethyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

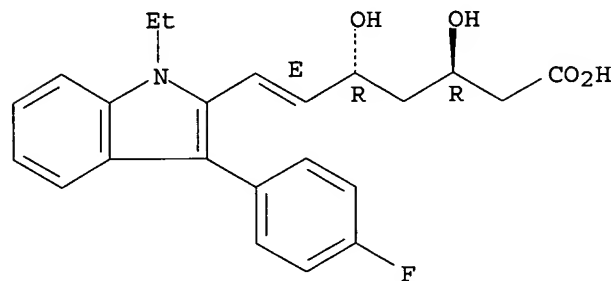
Relative stereochemistry.  
Double bond geometry as shown.



● Na

RN 93936-65-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-ethyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

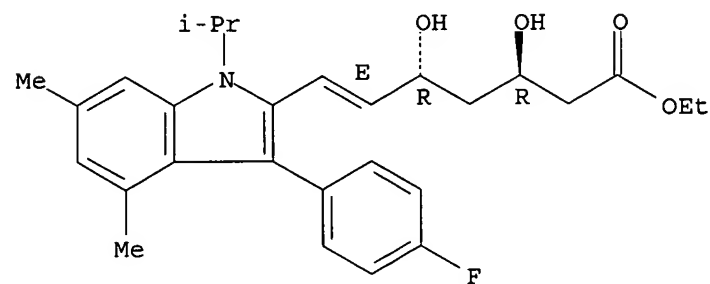
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 93936-66-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-4,6-dimethyl-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

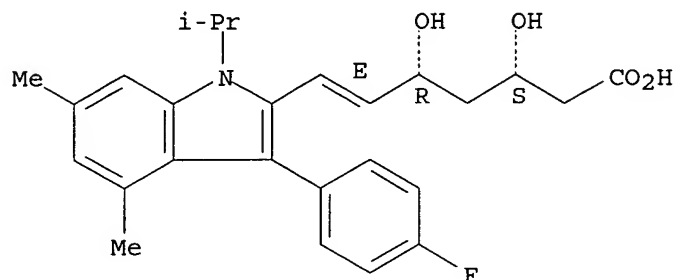
Relative stereochemistry.  
 Double bond geometry as shown.



RN 93936-67-5 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-4,6-dimethyl-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

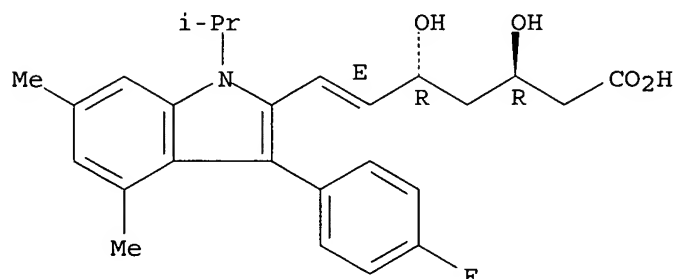


● Na

RN 93936-68-6 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-4,6-dimethyl-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



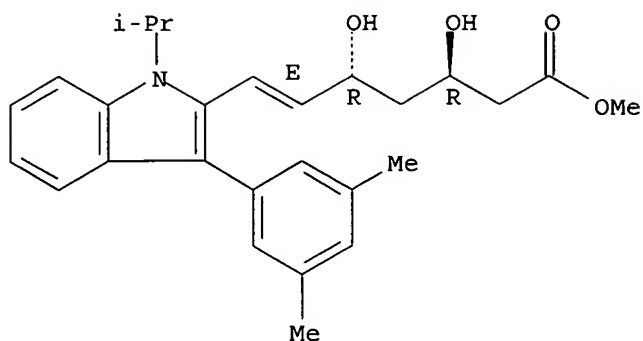
● Na

RN 93936-69-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

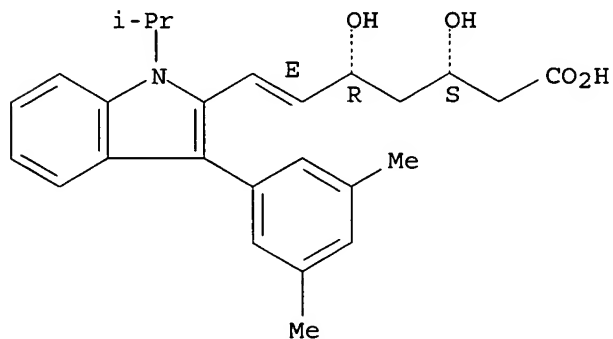




RN 93936-70-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

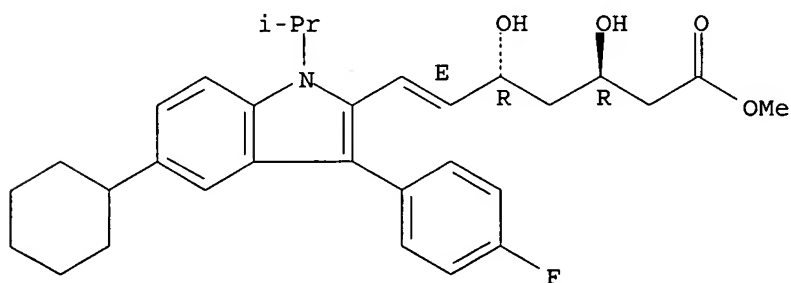


● Na

RN 93936-71-1 CAPLUS

CN 6-Heptenoic acid, 7-[5-cyclohexyl-3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

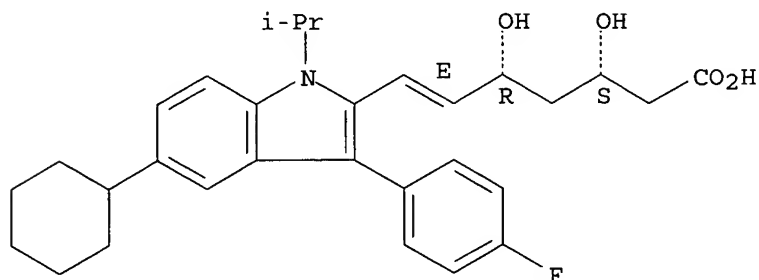
Relative stereochemistry.  
Double bond geometry as shown.



RN 93936-72-2 CAPLUS

CN 6-Heptenoic acid, 7-[5-cyclohexyl-3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

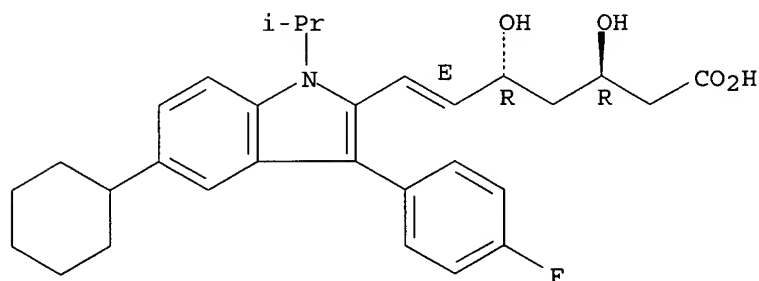


● Na

RN 93936-73-3 CAPLUS

CN 6-Heptenoic acid, 7-[5-cyclohexyl-3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

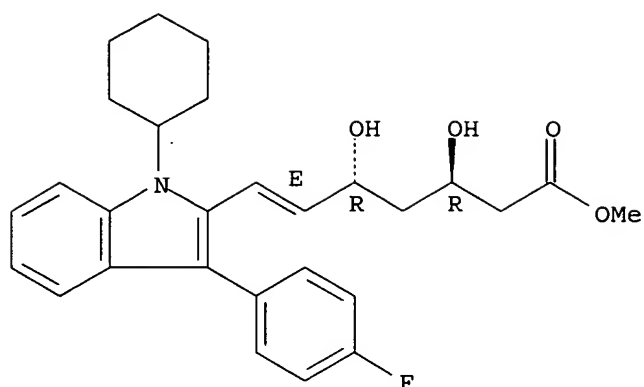


● Na

RN 93936-74-4 CAPLUS

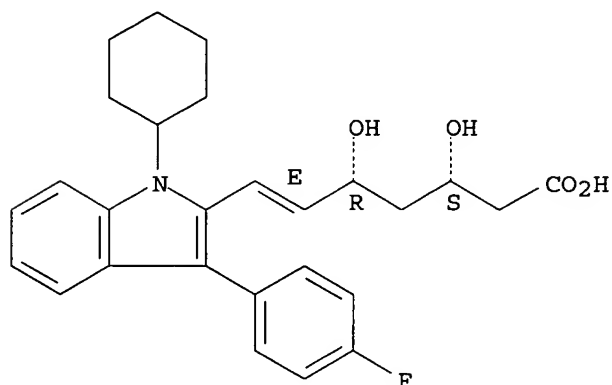
CN 6-Heptenoic acid, 7-[1-cyclohexyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 93936-75-5 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-cyclohexyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

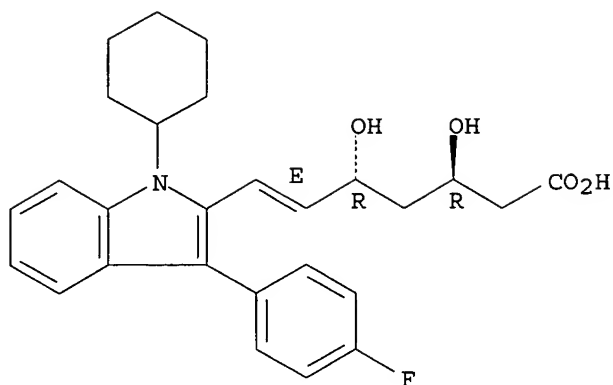
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 93936-76-6 CAPLUS  
 CN 6-Heptenoic acid, 7-[1-cyclohexyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

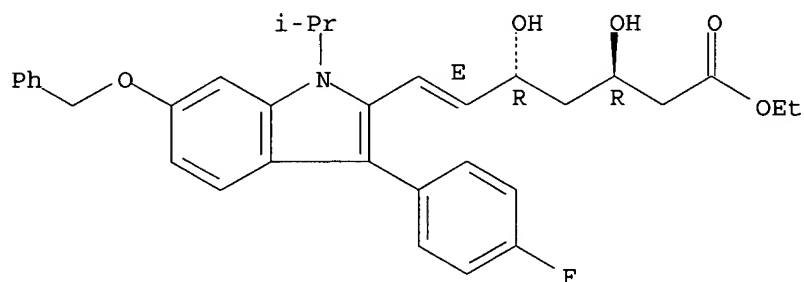
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

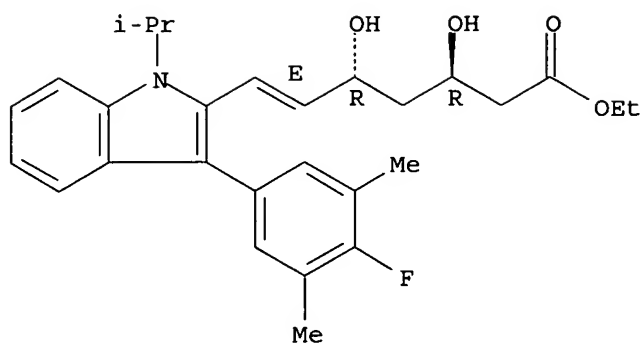
RN 93936-77-7 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



RN 93936-78-8 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluoro-3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]-(9CI) (CA INDEX NAME)

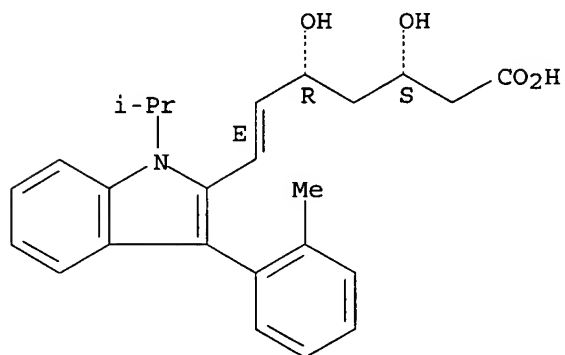
Relative stereochemistry.  
 Double bond geometry as shown.



RN 93936-79-9 CAPLUS

CN 6-Heptenoic acid, 3,5-dihydroxy-7-[1-(1-methylethyl)-3-(2-methylphenyl)-1H-indol-2-yl]-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

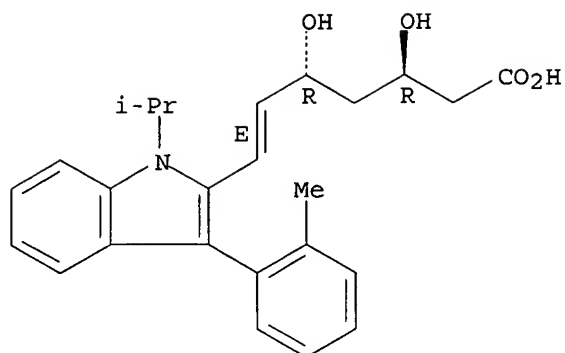


● Na

RN 93936-80-2 CAPLUS

CN 6-Heptenoic acid, 3,5-dihydroxy-7-[1-(1-methylethyl)-3-(2-methylphenyl)-1H-indol-2-yl]-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

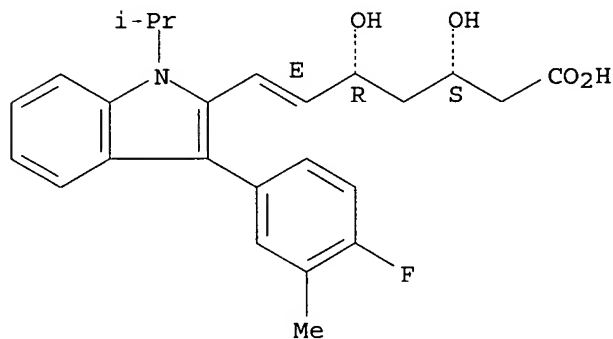
Relative stereochemistry.  
Double bond geometry as shown.



● Na

RN 93936-81-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluoro-3-methylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

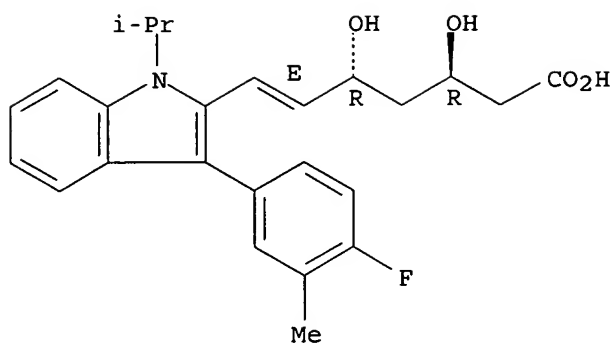
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 93936-82-4 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluoro-3-methylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

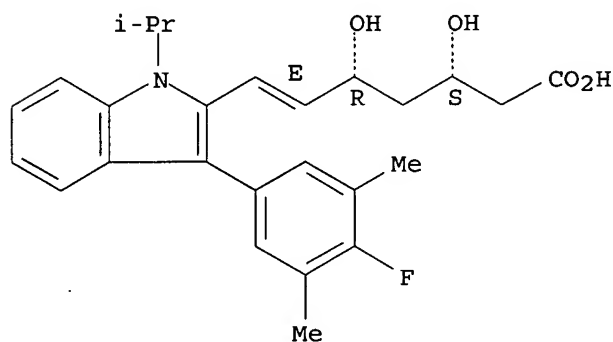
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 93936-83-5 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluoro-3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

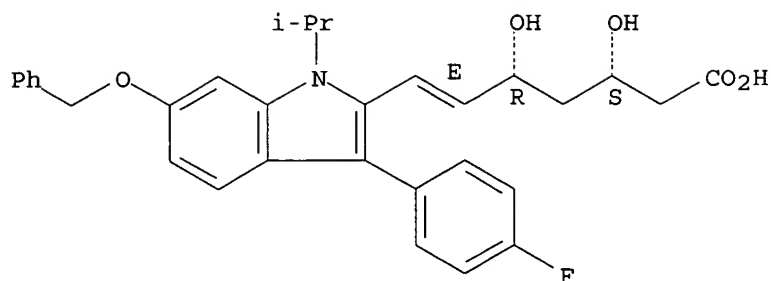
Relative stereochemistry.  
 Double bond geometry as shown.



● Na

RN 93936-84-6 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

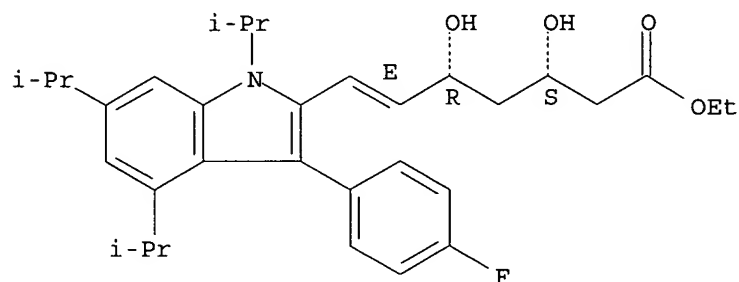


● Na

RN 93936-85-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1,4,6-tris(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

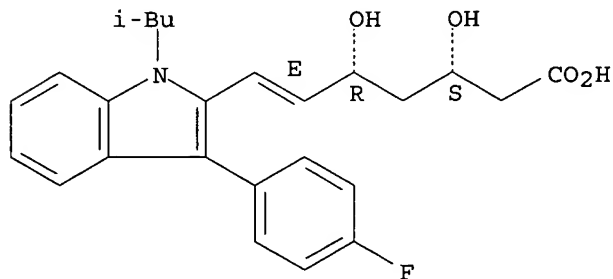
Relative stereochemistry.  
Double bond geometry as shown.



RN 93936-86-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-methylpropyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



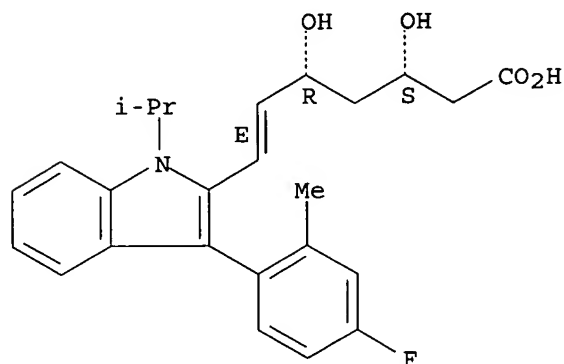
● Na

RN 93936-87-9 CAPLUS



CN 6-Heptenoic acid, 7-[3-(4-fluoro-2-methylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

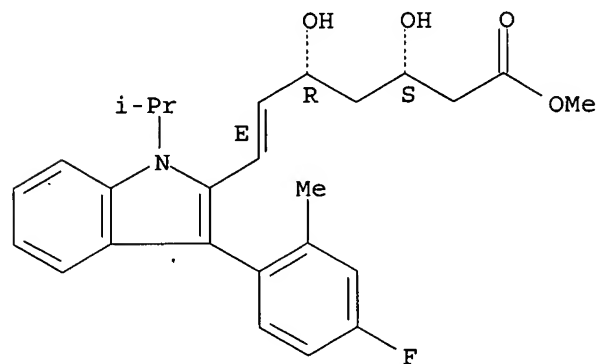


● Na

RN 93937-46-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluoro-2-methylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

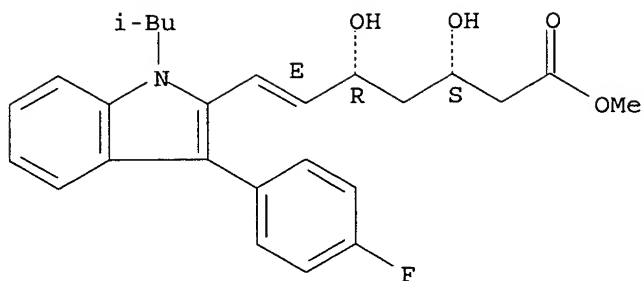
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-47-4 CAPLUS

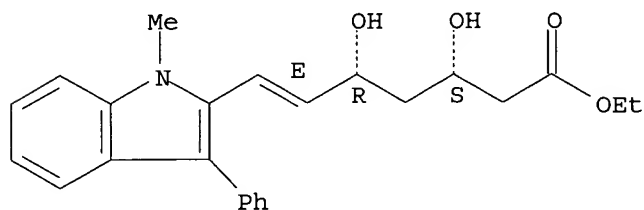
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-methylpropyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



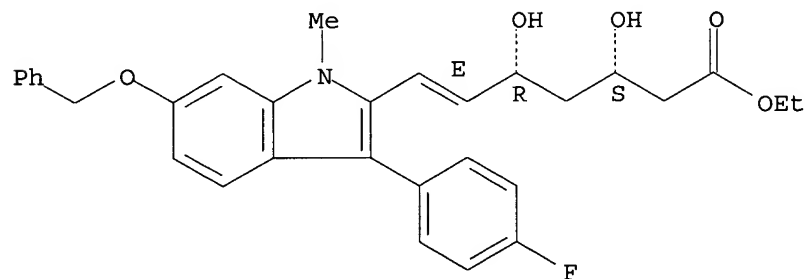
RN 93937-50-9 CAPLUS  
 CN 6-Heptenoic acid, 3,5-dihydroxy-7-(1-methyl-3-phenyl-1H-indol-2-yl)-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



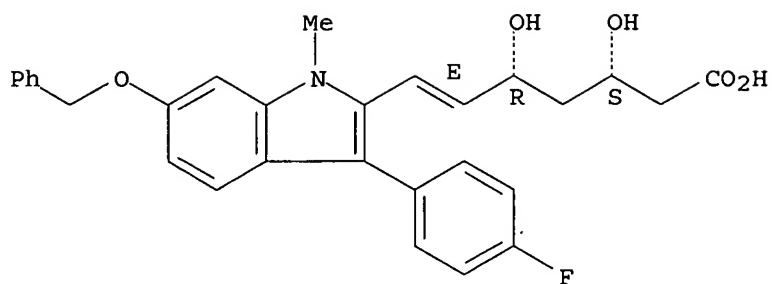
RN 93937-51-0 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



RN 93937-52-1 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.

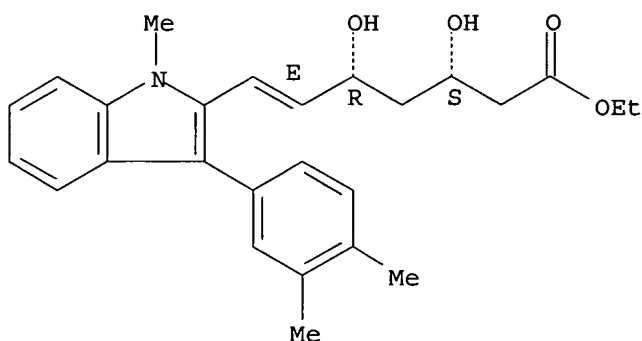


● Na

RN 93937-53-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,4-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

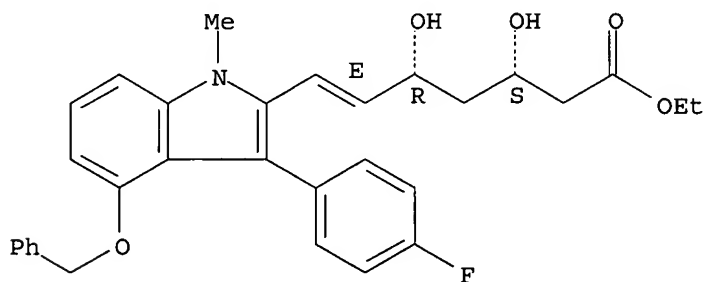
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-54-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-4-(benzyloxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

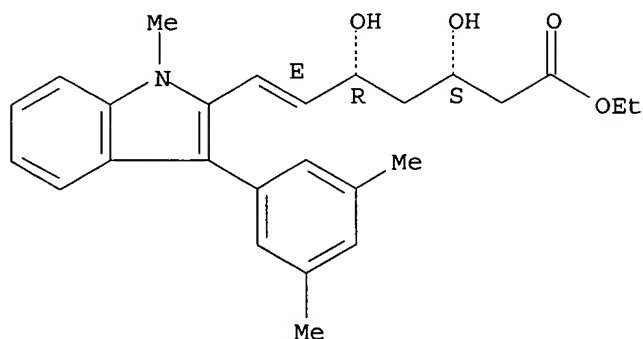


RN 93937-55-4 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-

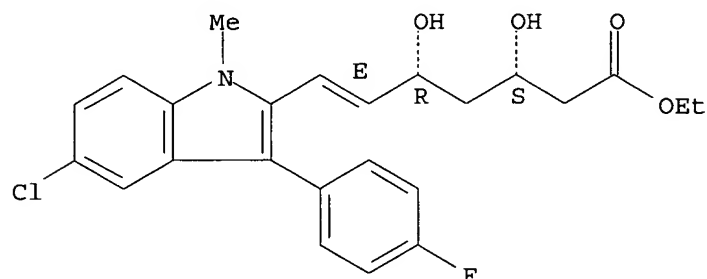
dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



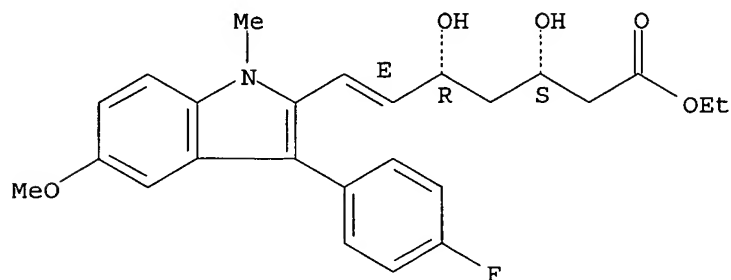
RN 93937-56-5 CAPLUS  
CN 6-Heptenoic acid, 7-[5-chloro-3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-57-6 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-5-methoxy-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

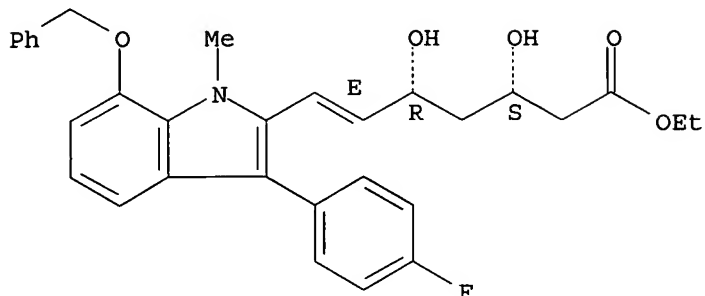
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-58-7 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-7-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

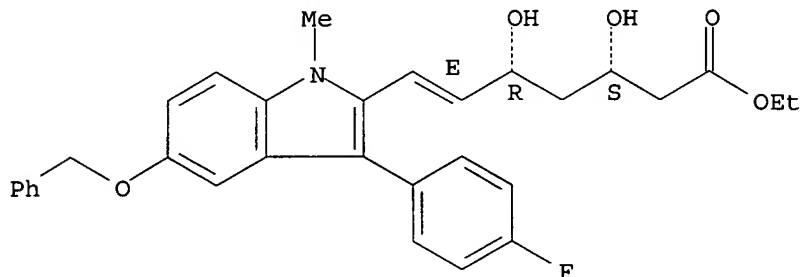
NAME)

Relative stereochemistry.  
Double bond geometry as shown.



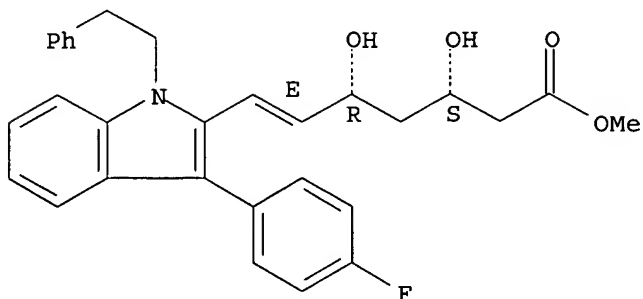
RN 93937-59-8 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-5-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-60-1 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-phenylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

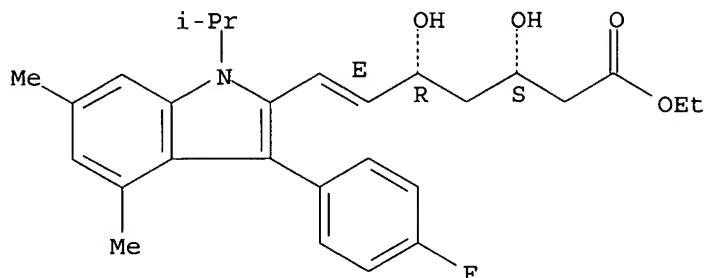
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-61-2 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-4,6-dimethyl-1-(1-methylethyl)-1H-

indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

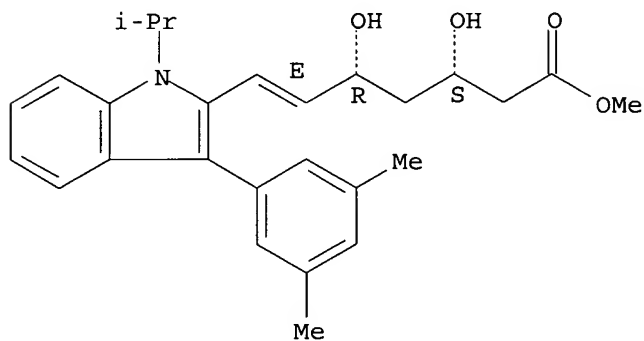
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-62-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

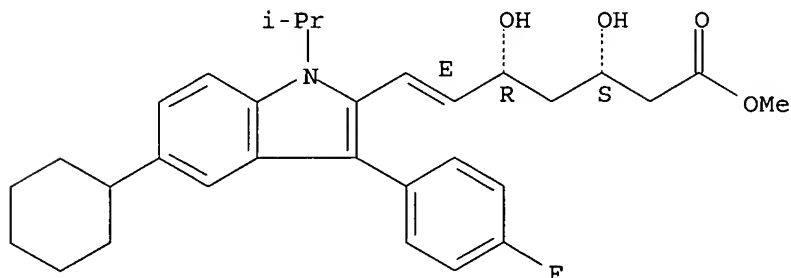
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-63-4 CAPLUS

CN 6-Heptenoic acid, 7-[5-cyclohexyl-3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

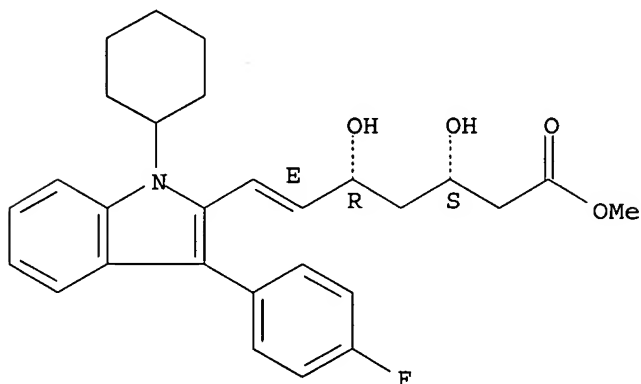
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-64-5 CAPLUS

CN 6-Heptenoic acid, 7-[1-cyclohexyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

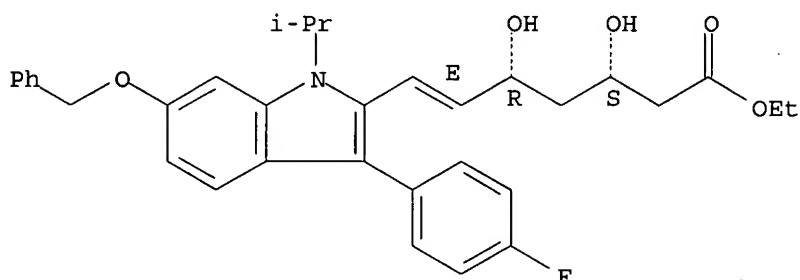
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-65-6 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

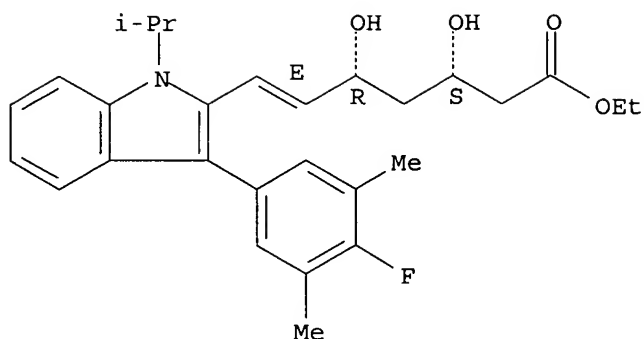
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-66-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluoro-3,5-dimethylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

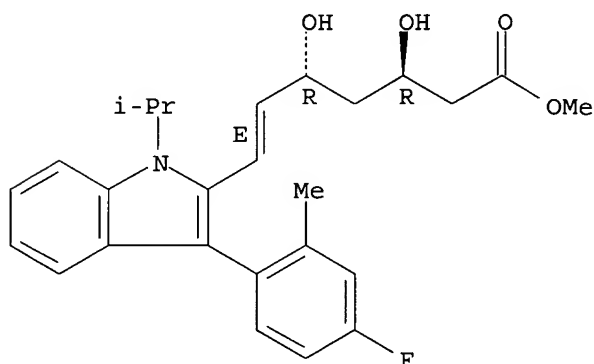
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-67-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluoro-2-methylphenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

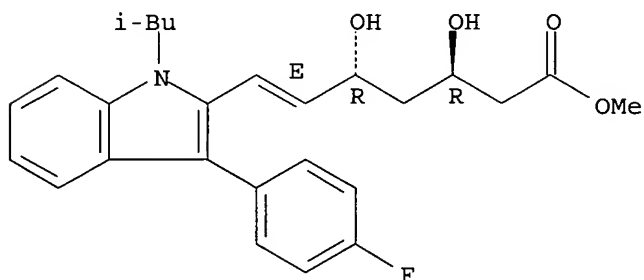
Relative stereochemistry.  
Double bond geometry as shown.



RN 93937-68-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(2-methylpropyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

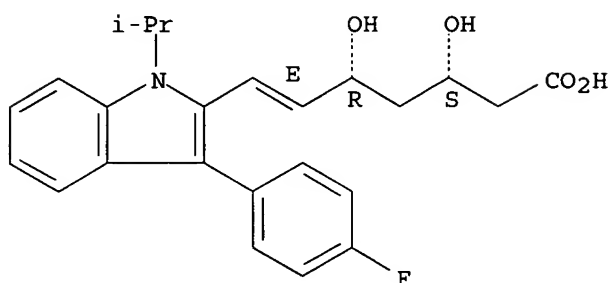


RN 93957-55-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)-rel- (9CI) (CA INDEX NAME)



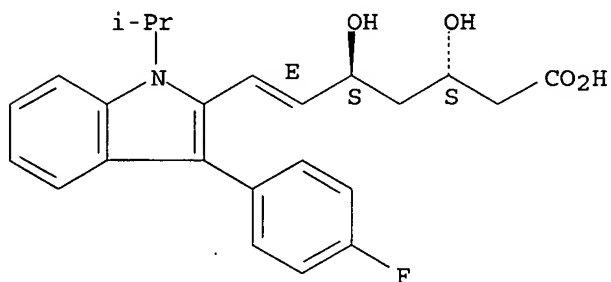
Relative stereochemistry.  
Double bond geometry as shown.



● Na

RN 93957-58-5 CAPLUS  
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

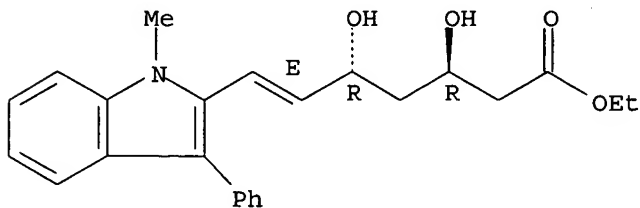
Relative stereochemistry.  
Double bond geometry as shown.



● Na

RN 93957-66-5 CAPLUS  
CN 6-Heptenoic acid, 3,5-dihydroxy-7-(1-methyl-3-phenyl-1H-indol-2-yl)-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

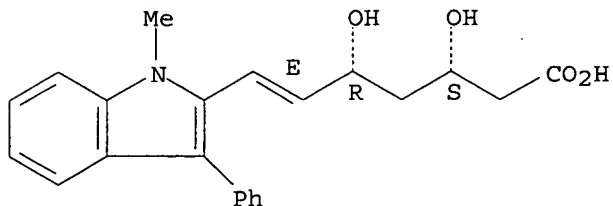
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-67-6 CAPLUS

CN 6-Heptenoic acid, 3,5-dihydroxy-7-(1-methyl-3-phenyl-1H-indol-2-yl)-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

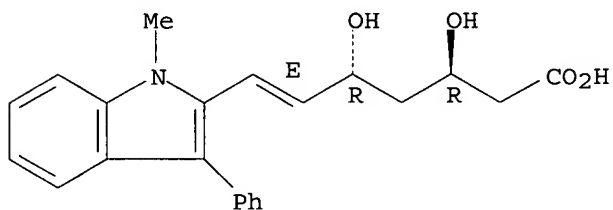


● Na

RN 93957-68-7 CAPLUS

CN 6-Heptenoic acid, 3,5-dihydroxy-7-(1-methyl-3-phenyl-1H-indol-2-yl)-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

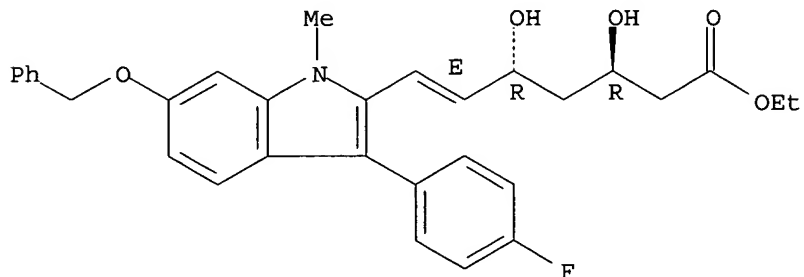


● Na

RN 93957-69-8 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

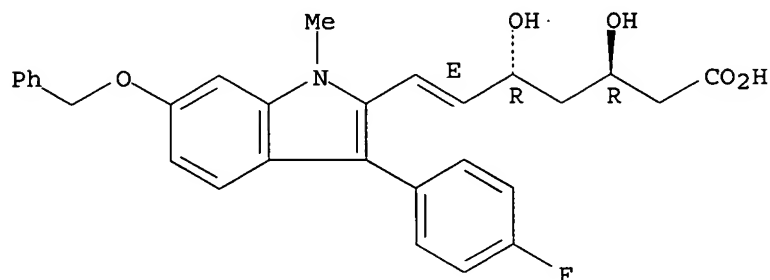
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-70-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-6-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.

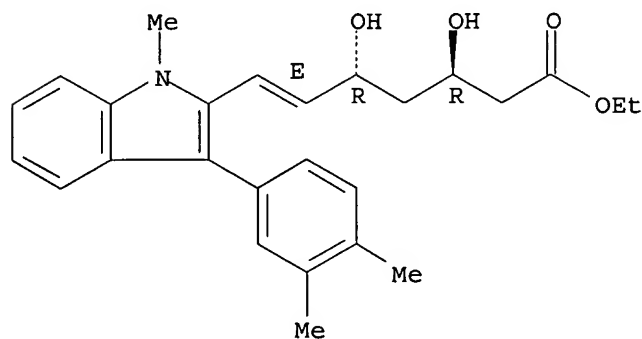


● Na

RN 93957-71-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,4-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

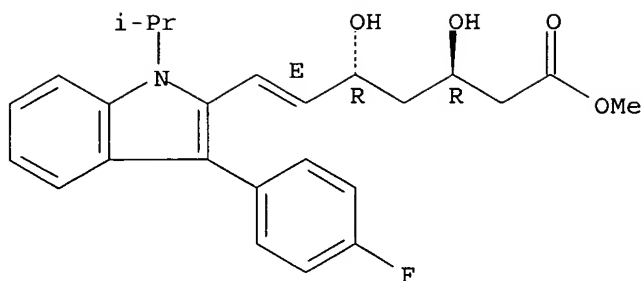
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-72-3 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

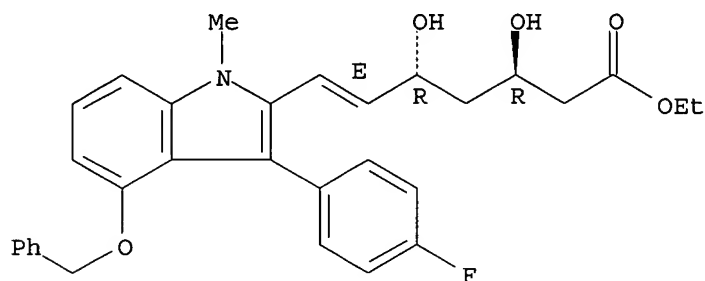
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-73-4 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-4-(phenylmethoxy)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

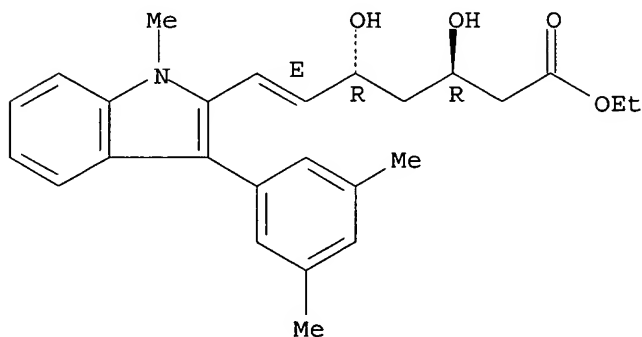
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-74-5 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

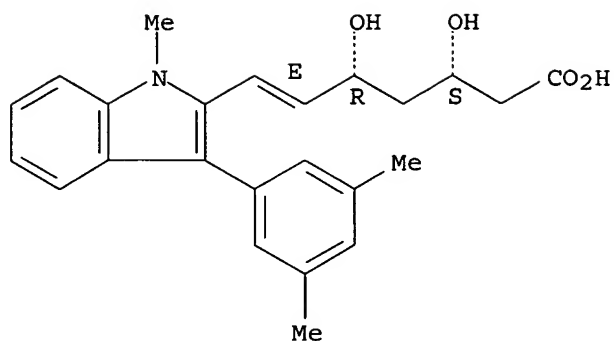
Relative stereochemistry.  
Double bond geometry as shown.



RN 93957-75-6 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



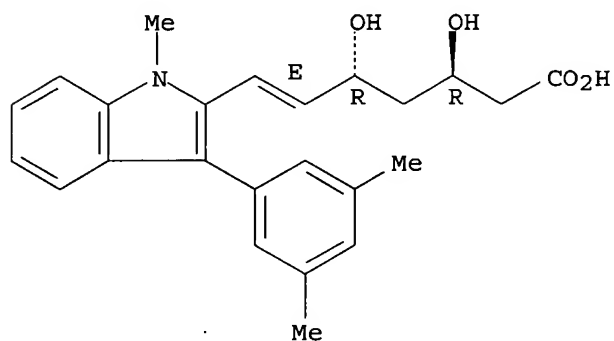
● Na

RN 93957-76-7 CAPLUS

CN 6-Heptenoic acid, 7-[3-(3,5-dimethylphenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



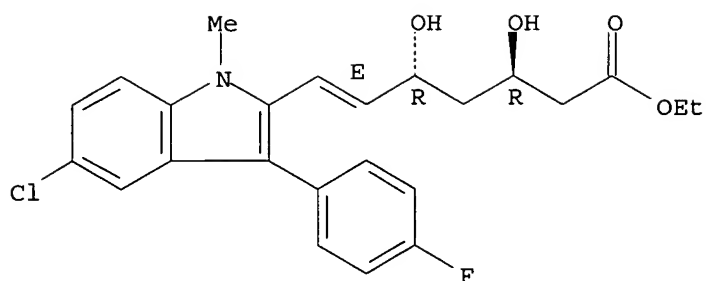
● Na

RN 93957-77-8 CAPLUS

CN 6-Heptenoic acid, 7-[5-chloro-3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

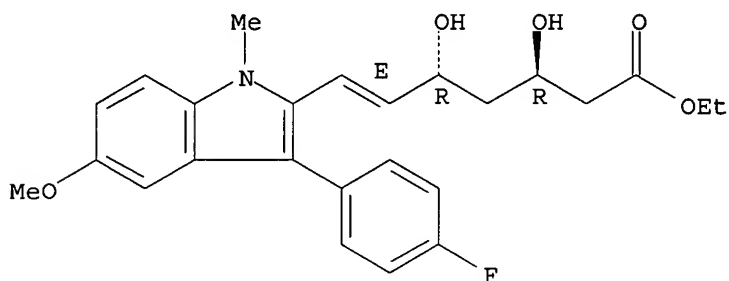
Double bond geometry as shown.



RN 93957-78-9 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-5-methoxy-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,R\*-(E)]- (9CI) (CA INDEX NAME)

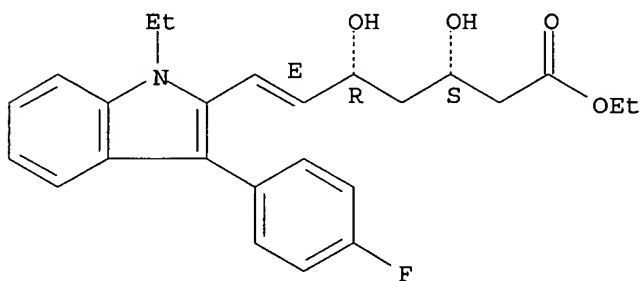
Relative stereochemistry.  
Double bond geometry as shown.



RN 93984-61-3 CAPLUS

CN 6-Heptenoic acid, 7-[1-ethyl-3-(4-fluorophenyl)-1H-indol-2-yl]-3,5-dihydroxy-, ethyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

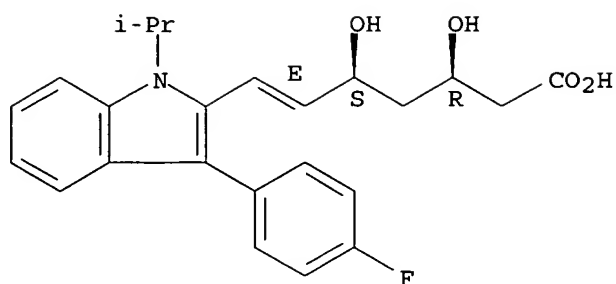
Relative stereochemistry.  
Double bond geometry as shown.



RN 94061-80-0 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



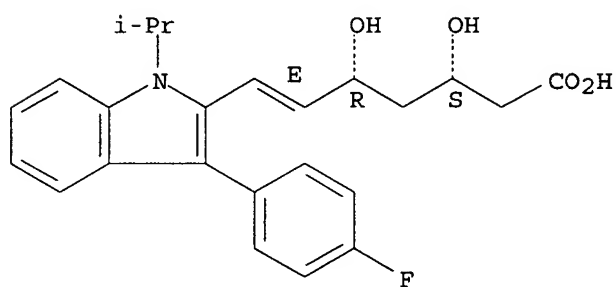
● Na

RN 94061-81-1 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, (3S,5R,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



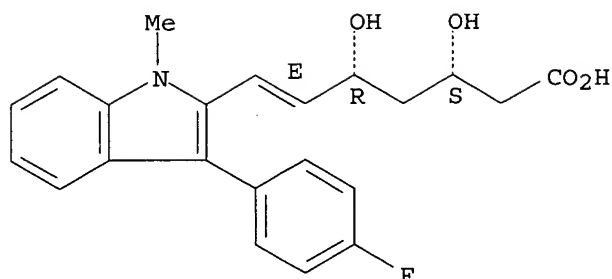
● Na

RN 103338-13-2 CAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, monosodium salt, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

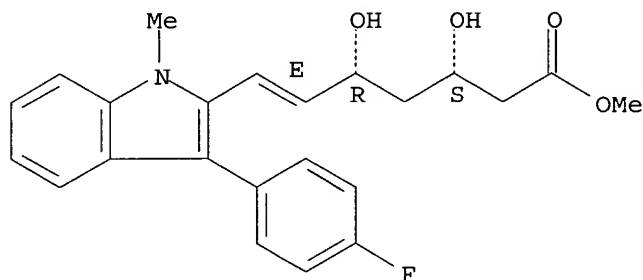
Double bond geometry as shown.



● Na

RN 103338-14-3 CAPLUS  
 CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-methyl-1H-indol-2-yl]-3,5-dihydroxy-, methyl ester, [R\*,S\*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



=> fil medl,biosis,embase,caplus;s chen g?/au and indole(1)calcium salt?

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	94.76	1247.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.87	-16.79

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L25 0 FILE MEDLINE  
 L26 0 FILE BIOSIS  
 L27 0 FILE EMBASE  
 L28 1 FILE CAPLUS

## TOTAL FOR ALL FILES

L29 1 CHEN G?/AU AND INDOLE(L) CALCIUM SALT?

=> d ibib abs

L29 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:1006762 CAPLUS

DOCUMENT NUMBER: 140:47480

TITLE: Calcium salts of indole  
 derived statins

INVENTOR(S): Chen, Guang-Pei; Kapa, Prasad Koteswara;  
 Sutton, Paul Allen

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105837	A1	20031224	WO 2003-EP6195	20030612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2486557	AA	20031224	CA 2003-2486557	20030612
EP 1515717	A1	20050323	EP 2003-740234	20030612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-388318P	P 20020613
			WO 2003-EP6195	W 20030612

OTHER SOURCE(S): MARPAT 140:47480

AB The present invention provides calcium salts of indole-derived statins. More specifically, the invention provides fluvastatin calcium (I), in a highly crystalline form. Furthermore, the present invention is directed to methods for the preparation of I, and to pharmaceutical compns. comprising the crystalline form. The I is effective for the prevention and/or treatment of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia, and atherosclerosis.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d hitstr

L29 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

=> dis his ful

(FILE 'HOME' ENTERED AT 16:46:00 ON 01 SEP 2005)

FILE 'REGISTRY' ENTERED AT 16:46:07 ON 01 SEP 2005

L1 STR  
L2 13 SEA SSS SAM L1  
L3 STR  
L4 0 SEA SSS SAM L1 AND L3  
L5 2 SEA SSS FUL L1 AND L3  
D L5 QUE STAT

FILE 'CAPLUS' ENTERED AT 16:48:34 ON 01 SEP 2005

L6 3 SEA ABB=ON PLU=ON L5  
D 1-3 IBIB ABS HITSTR  
S L1

FILE 'REGISTRY' ENTERED AT 16:49:30 ON 01 SEP 2005

L7 305 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 16:49:30 ON 01 SEP 2005

L8 1294 SEA ABB=ON PLU=ON L7

FILE 'REGISTRY' ENTERED AT 16:49:44 ON 01 SEP 2005

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L11 STR L10  
L12 6 SEA SSS SAM L10  
L13 0 SEA SSS SAM L11  
L14 113 SEA SSS FUL L10  
L15 0 SEA SSS FUL L11  
D L14 QUE STAT  
D L15 QUE STAT

FILE 'CAPLUS' ENTERED AT 16:51:48 ON 01 SEP 2005

L16 1 SEA ABB=ON PLU=ON L14 AND L5  
D IBIB ABS HITSTR

FILE 'REGISTRY' ENTERED AT 16:52:05 ON 01 SEP 2005

L17 STR L11  
L18 STR  
L19 0 SEA SSS SAM L17 AND L18  
L20 0 SEA SSS FUL L17 AND L18  
L21 STR L17  
L22 4 SEA SSS SAM L21 AND L18  
L23 92 SEA SSS FUL L21 AND L18  
D L23 QUE STAT

FILE 'CAPLUS' ENTERED AT 16:53:35 ON 01 SEP 2005

L24 19 SEA ABB=ON PLU=ON L14 AND L23  
D 1-19 IBIB ABS HITSTR

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:31 ON 01 SEP 2005

L25 0 SEA ABB=ON PLU=ON CHEN G?/AU AND INDOLE(L) CALCIUM SALT?  
L26 0 SEA ABB=ON PLU=ON CHEN G?/AU AND INDOLE(L) CALCIUM SALT?  
L27 0 SEA ABB=ON PLU=ON CHEN G?/AU AND INDOLE(L) CALCIUM SALT?  
L28 1 SEA ABB=ON PLU=ON CHEN G?/AU AND INDOLE(L) CALCIUM SALT?  
TOTAL FOR ALL FILES  
L29 1 SEA ABB=ON PLU=ON CHEN G?/AU AND INDOLE(L) CALCIUM SALT?  
D IBIB ABS

D HITSTR

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

DICTIONARY FILE UPDATES: 31 AUG 2005 HIGHEST RN 862246-83-1

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE CAPLUS

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FILE COVERS 1907 - 1 Sep 2005 VOL 143 ISS 10

FILE LAST UPDATED: 31 Aug 2005 (20050831/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MEDLINE

FILE LAST UPDATED: 31 AUG 2005 (20050831/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>  
[http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html)

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS  
FILE COVERS 1969 TO DATE.  
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 31 August 2005 (20050831/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE  
FILE COVERS 1974 TO 25 Aug 2005 (20050825/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

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=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	13.21	1260.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.73	-17.52

STN INTERNATIONAL LOGOFF AT 16:54:51 ON 01 SEP 2005

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Sabiba Qaz Examiner #: 74141 Date: 8/30/05  
Art Unit: 1616 Phone Number: 2-0622 Serial Number: 10/517/874  
Location (Bldg/Room#): 4A45 (Mailbox #): 4C70 Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

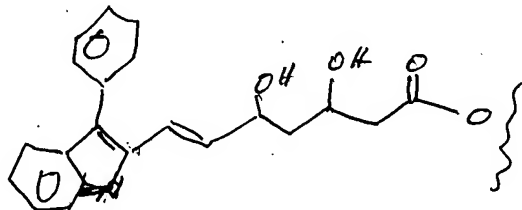
Title of Invention: Calcium salts of indole derived statinsInventors (please provide full names): Guang-Pei Chew et al.Earliest Priority Date: 6/13/02 371 of PCT/EPO3/06175 6/12/03

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number. Ch 1-14

Please search for the compd of formula 1A,  
1B, 1C, 1D + 1E and their use (cl 14).



Please note that compds of formula  
1A is a dimer

Please see attached sheets  
Thank you

## STAFF USE ONLY

## Type of Search

## Vendors and cost where applicable

Searcher: \_\_\_\_\_

\_\_\_\_ NA Sequence (#)

\_\_\_\_ STN

\_\_\_\_ Dialog

Searcher Phone #: \_\_\_\_\_

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Questel/Orbit

\_\_\_\_ Lexis/Nexis

Searcher Location: \_\_\_\_\_

\_\_\_\_ Structure (#)

\_\_\_\_ Westlaw

\_\_\_\_ WWW/Internet

Date Searcher Picked Up: \_\_\_\_\_

\_\_\_\_ Bibliographic

\_\_\_\_ In-house sequence systems

Date Completed: \_\_\_\_\_

\_\_\_\_ Litigation

\_\_\_\_ Commercial

\_\_\_\_ Oligomer

\_\_\_\_ Score/Length

\_\_\_\_ Interference

\_\_\_\_ SPDI

\_\_\_\_ Encode/Transl

Searcher Prep &amp; Review Time: \_\_\_\_\_

\_\_\_\_ Fulltext

\_\_\_\_ Other (specify)

Online Time: \_\_\_\_\_

\_\_\_\_ Other

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